



DreamBox 7020 for Newbies 1.6
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Guide for the Correct Setup of the DreamBox 7020-S

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Introduction

Congratulations on your new DreamBox purchase. You have already shown good judgment just by making this selection. The DreamBox is not “Plug and Play” but is also not rocket science. You should be familiar with simple Windows commands and be willing to become comfortable with Windows. This How To is designed to guide a beginner through all the steps necessary to watch TV as well as mentioning more advanced features.

Your new DreamBox will come preconfigured with an older official image from DREAM Multimedia. This will work great for FTA (Free-To-Air channels) and with modification will allow viewing of encrypted channels. Most DreamBox owners use private images. This Guide will discuss the use of the Pi (DBF) images from Germany but will also answer your general questions about other images.

First you will need to configure the DreamBox so you can communicate with it. A network is by far the recommended mode of communication with your DreamBox. The network actually isn't absolutely necessary since the DreamBox can be flashed via its Crossover LAN cable (not a standard Ethernet cable) but a network makes life much easier and is highly desirable. Much of the software used to program your DreamBox will require a network or a crossover cable. A crossover cable is only for those too cheap or lazy to setup a home network and connects directly from the DreamBox Ethernet port to your PC's Ethernet port.

This Guide is based on the Pi image. Further explanation of the menu items can be found in /var/docs after installation.

Disclaimer: We, in no way, encourage or condone the usage of the DreamBox for illegal satellite viewing. This guide is for educational use only and is not intended to assist in the theft of satellite signals.

Section 1

Quick Start Guide

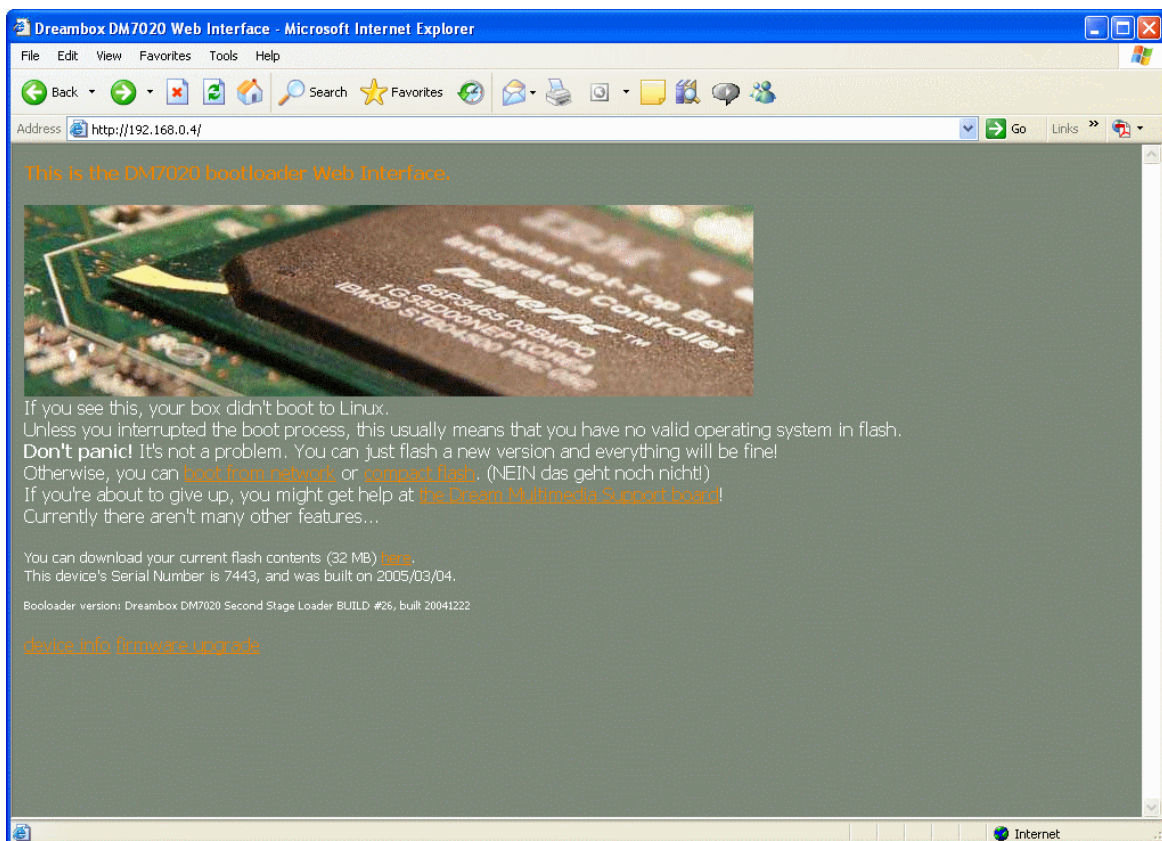
1. Download the latest official image that you can find on:
<http://developer.elitedvb.net/imagepoll.php>.
2. Download the latest Pi image that is in the forum at
<http://www.dbnation.tv>.
3. Connect your DreamBox to your Router via an ethernet cable and go ahead and connect to your TV. You MUST ASSIGN THIS IP by DHCP/Router or by Null Modem cable before flashing your DreamBox 7020! (What? No router? Do yourself a favor and get one or assign the IP address with your Null Modem cable and HyperTerminal. Click

[here](#) for directions for assigning the IP address using the Null Modem cable.)

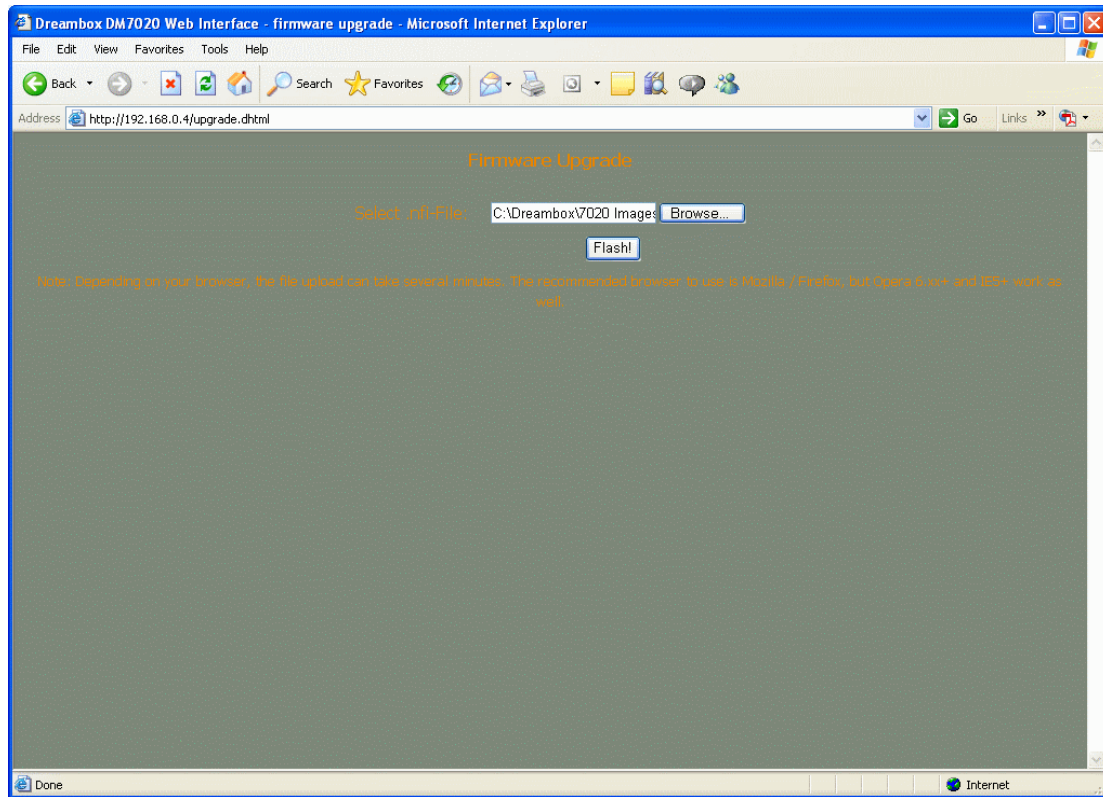
4. Hold the "Down" button and turn on the DreamBox. The screen will say "Stop" and you will see the IP settings for your DreamBox on the LCD screen.



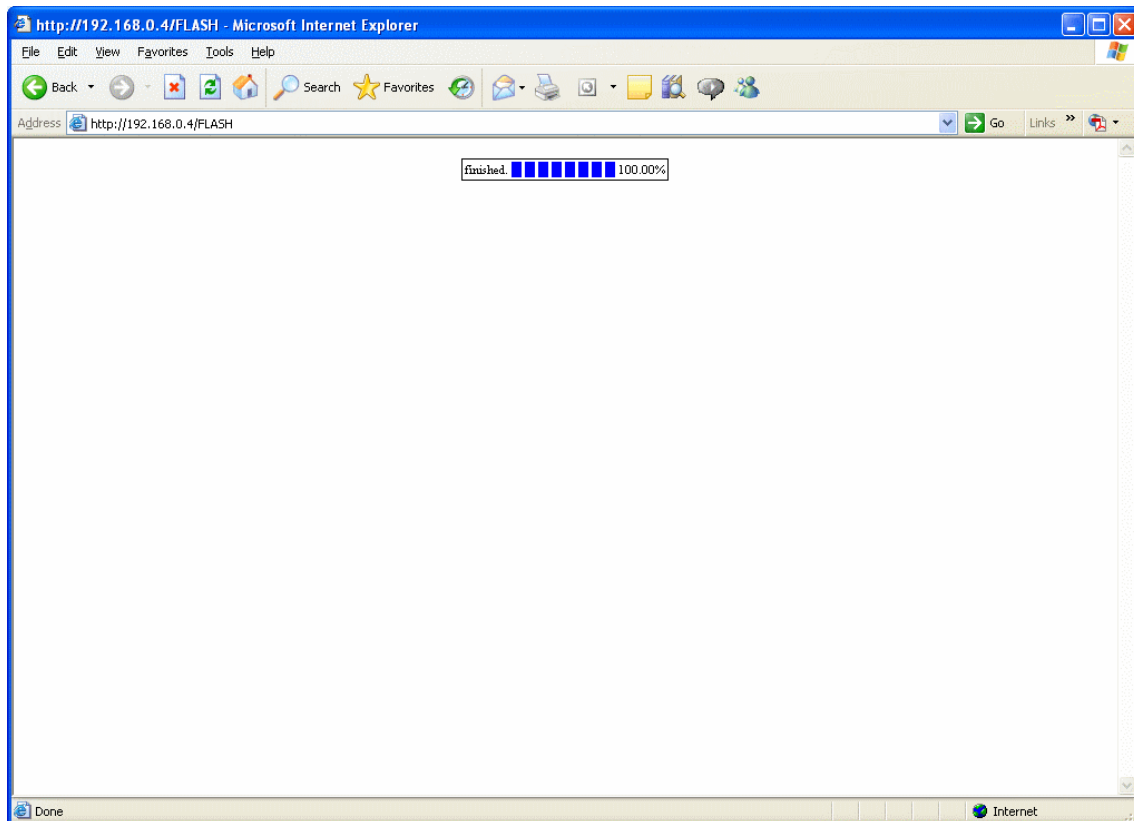
5. Start your internet browser and type in the following url: <http://yourIPsettings>. I.e: <http://192.168.0.101>.
6. You will see:



7. Click "firmware upgrade".
8. Browse to the official image that you downloaded.



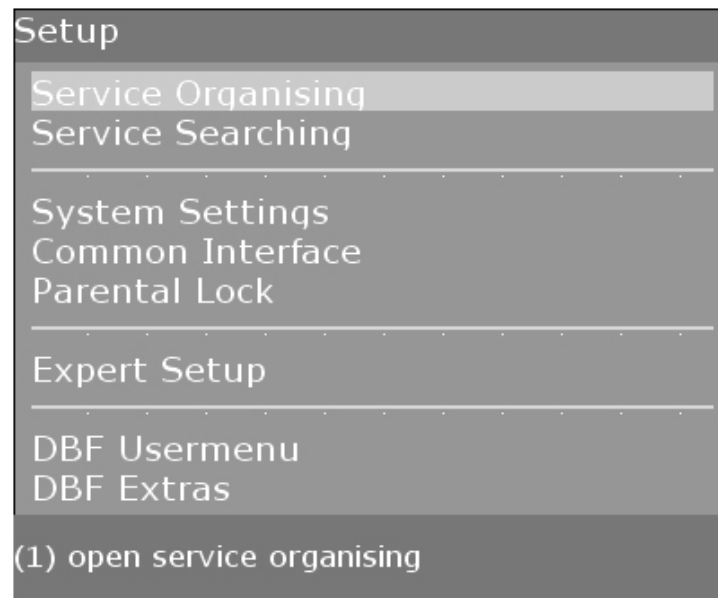
9. Click "Flash" and it will begin the process and let you know when completed.



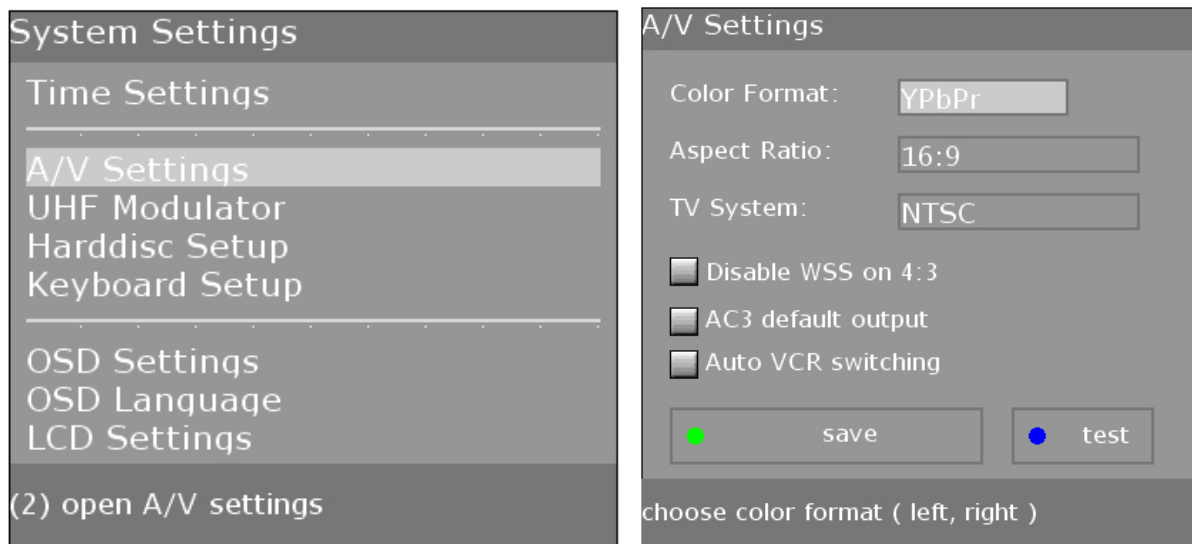
10. Turn off the DreamBox.
11. Start over at step #4 above with the private image of your choice. In this Guide that is the DBF Pi image.
12. Turn the DreamBox off and then back on to restart after you have flashed the DreamBox with the DBF image.
13. NO FLASH ERASE IS NEEDED WITH THE 7020.

From this point on the setup is exactly like the DreamBox 7000.

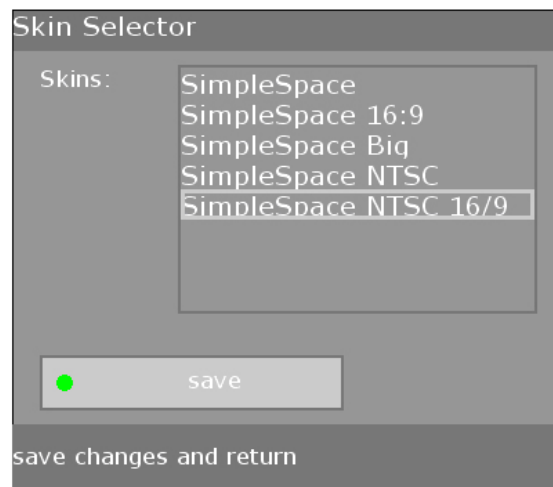
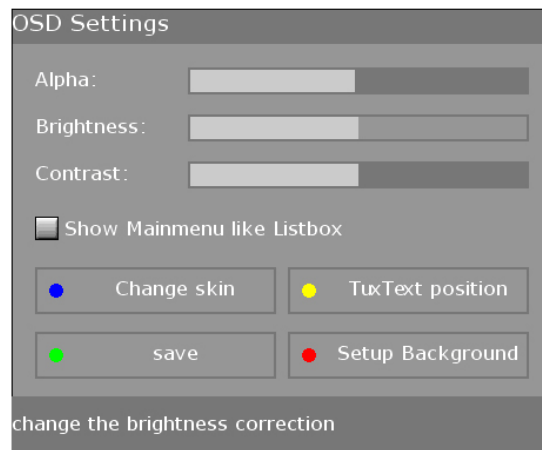
14. The boot logo will be flickering when the DreamBox is booting because it boots up in PAL mode instead of NTSC. Press the right arrow on your remote 3 times to change to NTSC mode.
15. You may also select Svideo or component video at this point or do it later under AV settings. Press "OK".
16. Select your language and timezone as you go along.
17. Press the "Menu" button and go to "Setup". The menu will be low on the screen and difficult to read until you change the skin below.



18. Go to "System Settings" to make sure you have all your "A/V Settings" are correct.



19. Go to OSD Settings to select one of the SimpleSpace NTSC skins.



20. Configure "[Communications](#)" in "Expert Setup" and make sure you have chosen NTSC and English so you can use DreamBox Control Center and DreamBoxEdit as described later in this Guide.
21. [Load the most recent DB Nation Service List](#) (channel list) from our [forum](#). Right now there is an unusual glitch with the channel lists so please use the DB Nation channel list for the 7020. Anytime you scan transponders you erase info in the service list. Dish Network transponders cannot be scanned so don't try. If the desired satellites are in the service list on this forum use it. If you need to add satellites, scan them in one at a time using automatic scan.
22. Setup '[Satellite Configuration](#)'.
23. [Reload DB Nation service list](#).

This will get you the free-to-air channels. If you plan to test other channels (which we don't encourage or condone your doing) then you need to install an emu and

apply keys. The key files are SoftCam.Key and AutoRoll.Key for Radegast and Autoupdate, camd_cfg, Keylist, replace.list, and thirteen nagra files for Evocamd. These file names are case-sensitive! Most people in North America use Evocamd.

24. [Install your Emu.](#)

25. [Install the keys.](#)

Error Messages:

If the screen says 'Service not Found' then you need to correct your setup of satellites in Satellite Configuration, FTP a new Service/Channel list to the DreamBox, replace your switches, or check your wiring.

If the screen is black without messages then you have an emu problem and need to check where you FTP'ed the "Key" files and/or reboot.

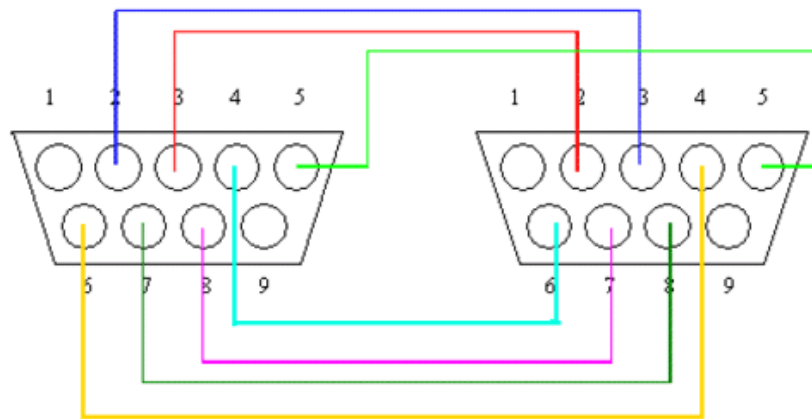
Section 2

Recommended Equipment and Software

Equipment:

1. Null modem cable (make your own if you want) though I you will only need it to assign an IP for initial flashing if you don't have a router and if you destroy two boot loaders on your DreamBox 7020.

Null Modem DB9 cable : Dreambox Serial cable



The DB9 side showed here is the one you solder the wires

2. SCART adapter if you want component video or Svideo. The 7020 comes with RCA composite out connectors.



OR



Composite

SVideo

3. LAN so you can connect to your Box from a PC and so you can get to the internet. You can use the crossover cable if you cannot get a LAN going.
5. A computer on the LAN with hard drive space on which to set up an NFS drive or a hard drive in the DreamBox itself. This is only necessary if you plan to record shows.

Software:

1. Newest DreamBox for Newbies file from this forum or from www.dreamboxfornewbies.org.
2. DreamBoxEdit (1.85 is the current release.)
3. DreamBox Control Center (DCC 2.4 is the current release.)
4. DreamUp 7020(<http://www.dm7020.de/> though I doubt you will need it.

5. Most current DB Nation Service/Channel list from the Channel List section of [DB Nation Forum](http://dbnationforum.com).
6. Private image of your choice. (This Guide is written specifically for the DBF images but can be used for any image with minimal modifications.)
7. You also need the latest Official image from the manufacturer.
<http://developer.elitedvb.net/imagepoll.php>.

Section 3

Using DreamUp

Purpose: DreamUp is used to put the initial factory image on your DreamBox and to fix a DreamBox that is frozen. When the situation seems hopeless, use DreamUp. I don't believe this section is going to be necessary so I am not going to include until I see otherwise.

Section 4

Initial Set-Up

After turning on your DreamBox for the first time you should see this screen:



1. Use your remote to change from the default, which is PAL, to NTSC. You will also be asked to select your primary language next, which will be English for most of us.



2. You will see the DiSEqC Configuration screen next but we are not ready to do this yet so press the “Exit” button several times.
3. Now press the “Menu” button on your remote and find “Settings” then “System Settings” and finally “AV Settings” and choose the correct configuration for your TV. i.e. RGB, SVideo The incorrect choice may give you black and white viewing.
4. Press the “Up” arrow on the remote to go to “Time Settings” and press “OK”. Choose Time Zone and choose yours. Press the Green button or arrow down to the “save” box and press “OK” to save your time zone. You will be asked if you want to “Restart Now” and you will press “OK” to do so.

Section 5

Configuring Your Network

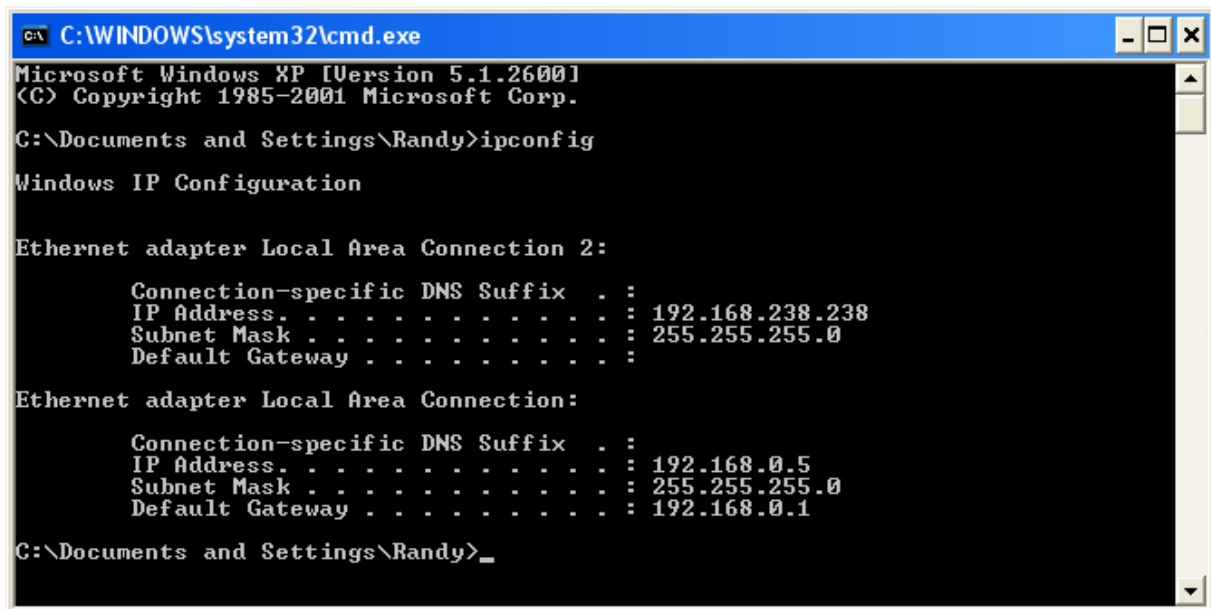
Equipment:

1. Router or Switch.
2. PC with NIC (ethernet card).
3. CAT5 cable connecting the PC to your Router and your DreamBox to the Router. You can use a wireless LAN/Bridge in place of the hard-wired system if you prefer. (A crossover cable also works for those too cheap or lazy to construct a home network.)

Procedure:

1. Determine your Network settings.
 - a. You will need the IP address of your Router and decide what IP you plan to use for the DreamBox. We recommend using 192.168.0.24 for your DreamBox since some software comes preconfigured with that IP.
 - b. Your DreamBox and Router must have the same numbers in the first 3 sections of their IPs. i.e. If your Router is 192.168.0.1 use 192.168.0.24 for your DreamBox. If the router is 220.120.34.6 then use 220.120.34.24 for your DreamBox.
 - c. If you are not sure of your network settings you can find them from your PC. Go to Start and click “Run”

and enter "cmd" in the blank without the quotes. At the prompt, enter ipconfig. IP Address is the address of the PC you are on. Subnet mask you will use later. Default Gateway you will also use later. (This should be your router IP also.)



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Randy>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection 2:

    Connection-specific DNS Suffix  . : 
    IP Address. . . . .               : 192.168.238.238
    Subnet Mask . . . . .             : 255.255.255.0
    Default Gateway . . . . .         : 

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    IP Address. . . . .               : 192.168.0.5
    Subnet Mask . . . . .             : 255.255.255.0
    Default Gateway . . . . .         : 192.168.0.1

C:\Documents and Settings\Randy>
```

2. Press the "Menu" button to bring up the toolbar at the bottom of the screen. Look for the "Setup" icon and press OK. Go to "Expert Setup" then "Communication Setup".
3. Here you will enter the addresses for your network so you can communicate with the DreamBox from other PCs and so you can get to the internet from the DreamBox if needed. This can also be setup as DHCP. If you plan to do this, you shouldn't need to ask how.

Communication setup

IP: 192 .168 .0 .24 ☐ DHCP

Netmask: 255 .255 .255 .0

Type: LAN ▼

Nameserver: 192 .168 .0 .1

Gateway: 192 .168 .0 .1

☒ Enable Network Port: 80

☒ save ☐ mounts

enter IP Address of the box (0..9, left, right)

DHCP: Uncheck this box or you won't be able to fill in the following blanks.

IP: Is the IP of your DreamBox. Assign it as described above. Usually, 192.168.0.24.

Netmask: Just about always 255.255.255.0.

Type: LAN

Nameserver: Is usually the IP of your Router. Usually 192.168.0.1.

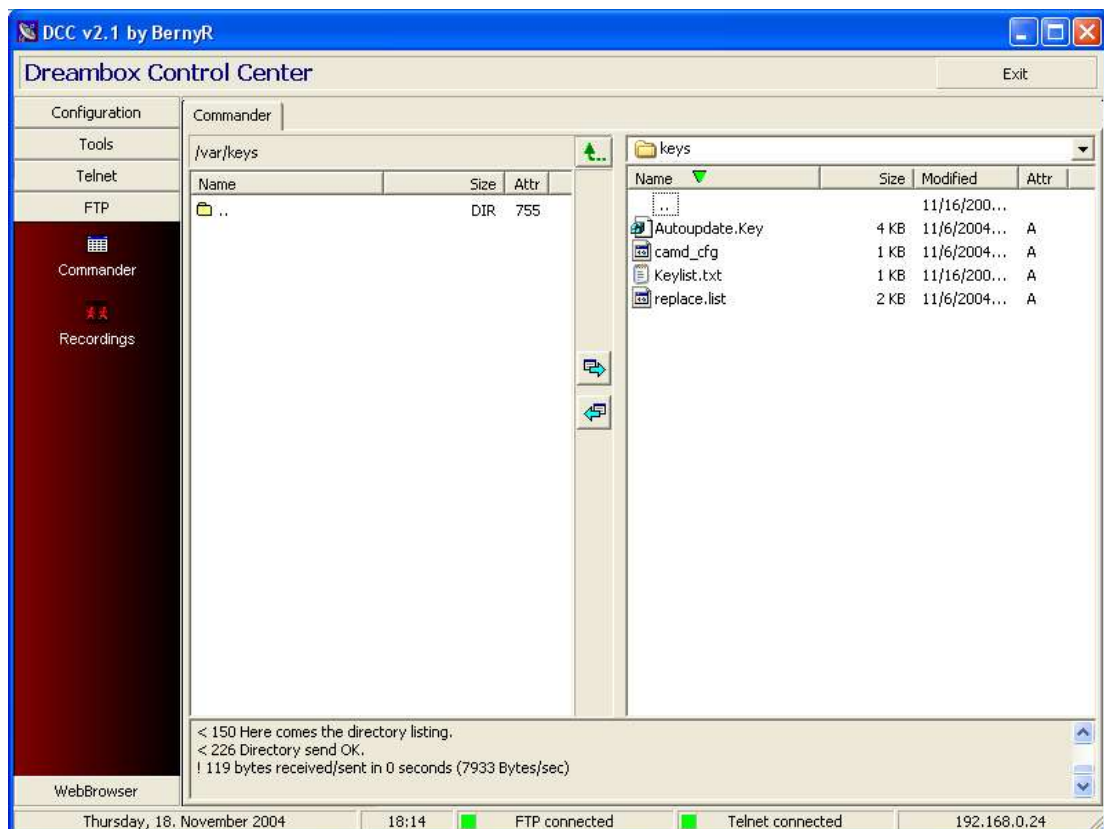
Gateway: Is usually the IP of your Router. Usually 192.168.0.1.

Be sure to check the "Enable Network" box and select save by pressing the **Green** button or highlighting "save" and pressing "OK".

Using DCC to Load Keys

Procedure for images with **Evocamd**:

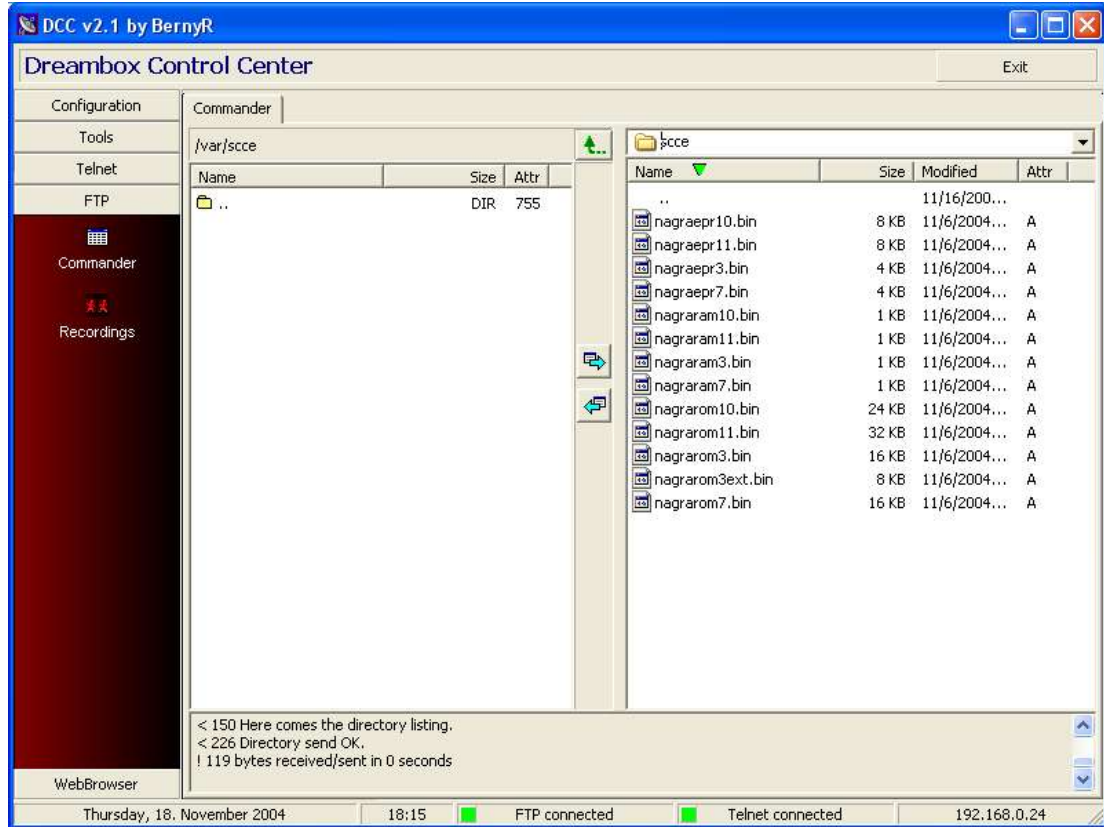
1. Download **Autoupdate.Key**, **Keylist.txt**, and **replace.list**.
2. Start DCC.
3. Click FTP tab at left.
4. Browse through the right side pane until you find the three key files. (**camd_cfg** should already be there.)
5. Double click on "var" on left side and then double click on "keys" to open /var/keys.



6. Highlight one of these four files and click the leftward pointing arrow between the DreamBox and the PC pane to send the file to the DreamBox.
7. Repeat with the other files.
8. Make sure the capitalization is correct; it does matter.
9. Then press the upward pointing green arrow located at the top of the area between the left and right panes. This will

take you up one file hierarchy to “/var”. Now double click on “scce” to open /var/scce.

10. Find the 13 “nagra” key files on your PC in the right pane of your DCC.



11. Highlight one of these three files and click the leftward pointing arrow between the DreamBox and the PC pane to send the file to the DreamBox.
12. Repeat with the other files.
13. Make sure the capitalization is correct; it does matter.

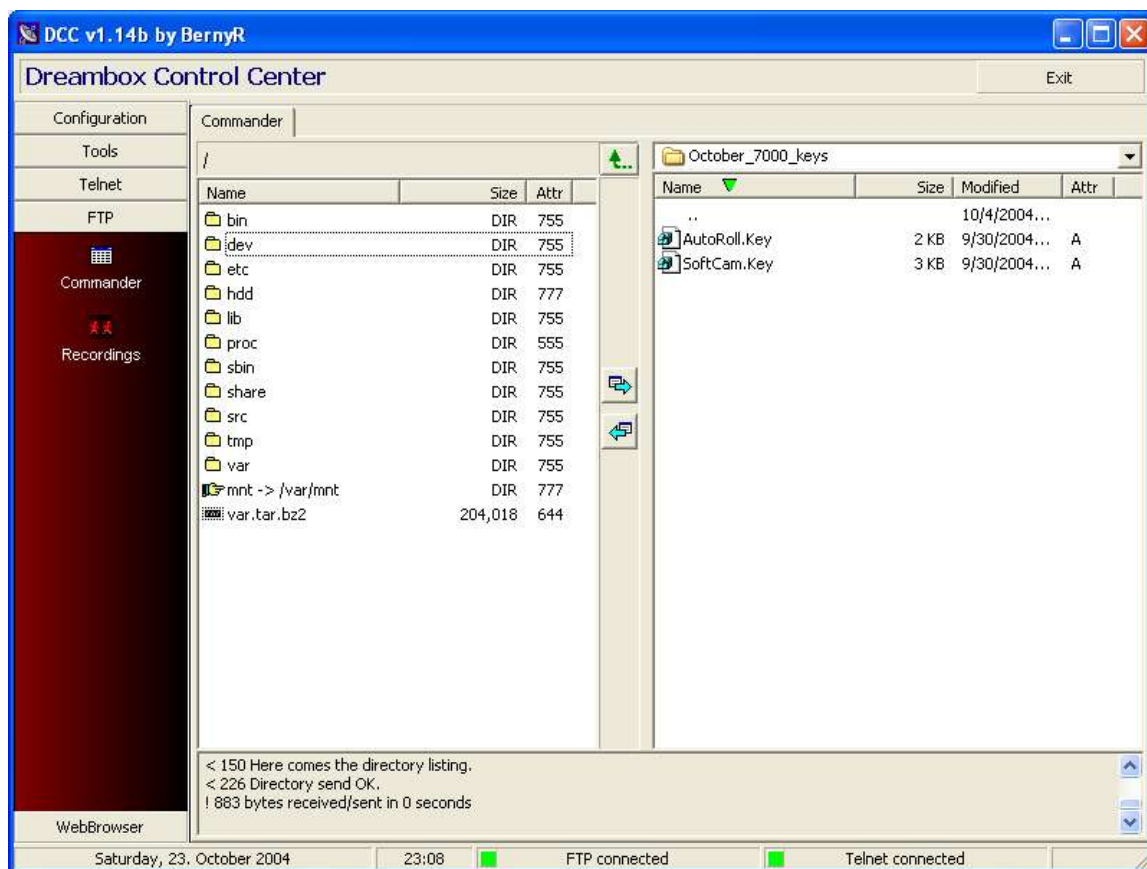
Procedure for images with **Newcamd**:

1. Use DCC as described above and transfer the **keylist**, **rsakeylist**, **mappings**, **nagraepr10**, **nagraram10**, **nagraron10**, **nagraepr3**, **nagraram3**, **nagraron3**, and **nagraron3ext** to the /var/tuxbox/scce folder not /var/scce. You can transfer them all if you like but the “7”s aren’t used right now. This **keylist** is different from

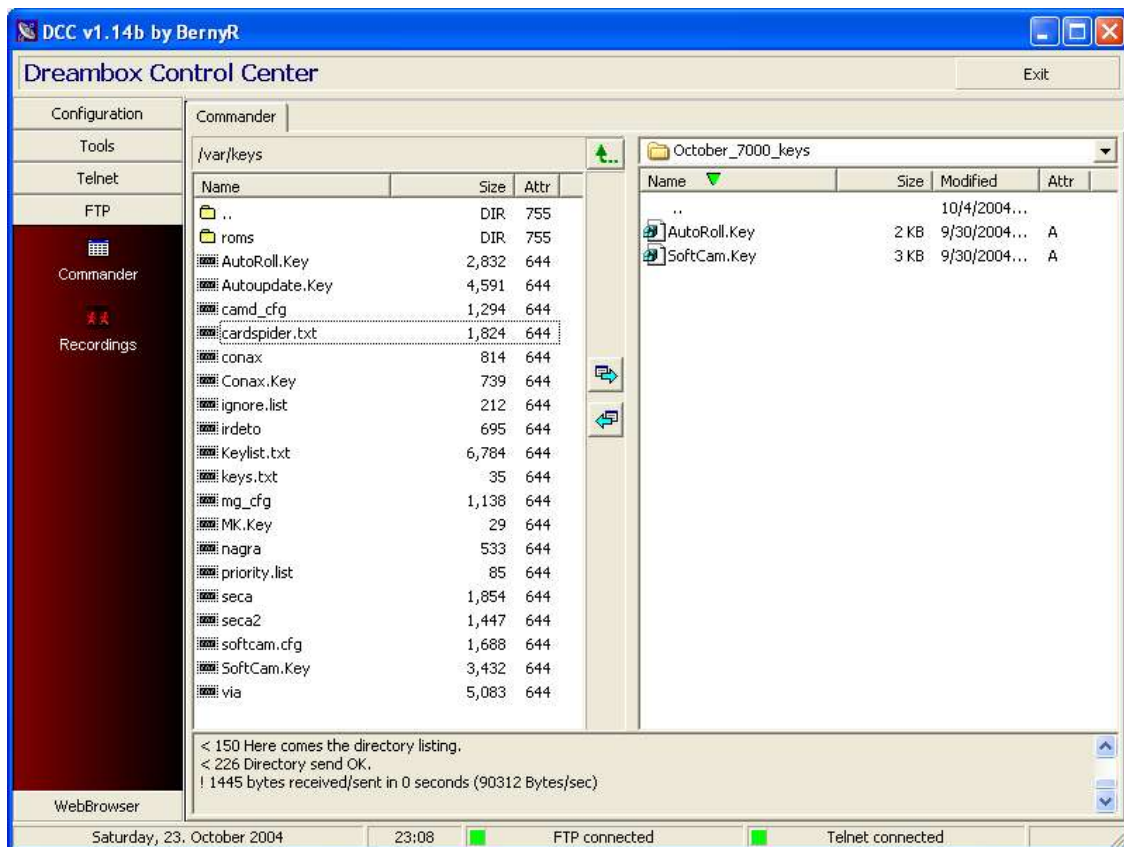
Evocamd's **keylist.txt**. Newcamd does not use /var/keys at all.

Procedure for images with **Radegast**:

1. Download **SoftCam.Key** and **AutoRoll.Key**.
2. Start DCC.
3. Click FTP tab at left.
4. Browse through the right side pane until you find the two key files.



5. Double click on "var" on left side and then double click on "keys" to open /var/keys.



6. Highlight one of the “.Key” files and click the leftward pointing arrow between the DreamBox and the PC pane to send the file to the DreamBox.
7. Repeat with the other file.
8. Make sure the capitalization is correct; it does matter.
(**SoftCam.Key** and **AutoRoll.Key**)

Section 7

Uploading Service Lists and Satellite Settings

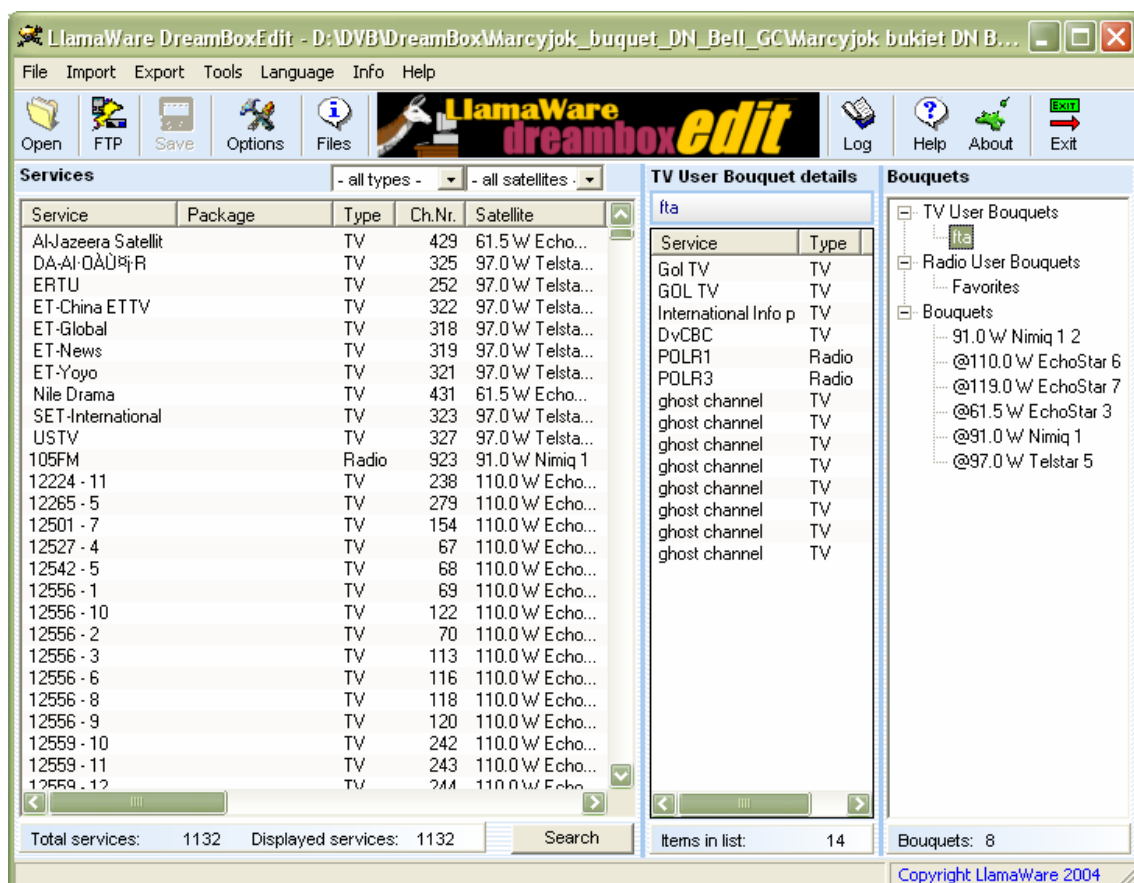
Your DreamBox will be loaded with a **satellites.xml** file from Europe so you will not be able to select the North American satellites until you have replaced that file. This file is part of the Service List. The Service List, or Channel List as most people refer to it, contains all of the transponder and channel information necessary to tune channels. The current images are not capable of scanning Dish Network satellites correctly so we use other equipment to scan satellites and make service lists. The newest DB Nation Service List will always be in the [forum](#) under Channel Lists. Once you scan a satellite with the DreamBox, it automatically replaces the information that was

there. In other words, it DELETES the service list information for that satellite.

The uploading and backing up of these settings is performed with a program called DreamBoxEdit as well as others that are available. DreamBoxEdit allows you to make changes to your service or channel list manually as well as allowing you to use a stock list from our forum. This program allows you to make lists of favorites called "Bouquets". You will backup your Bouquets and Services with this program.

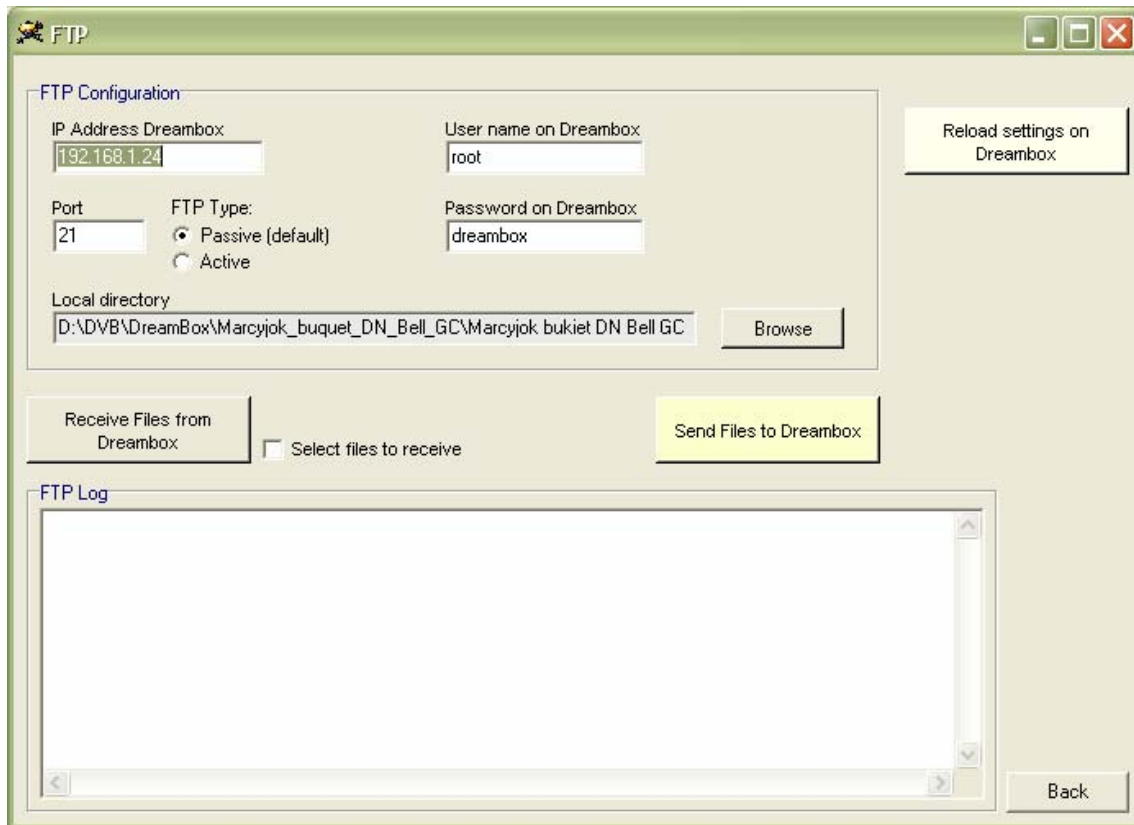
Procedure:

1. Download the newest DB Nation Service list from our [forum](#).
2. Launch the DreamBoxEdit program and open the folder to which you extracted the files.



3. You will see something like the above screen. Click the FTP tab.
4. In the next window, make sure the IP Address of your DreamBox is correct.

5. Click “Send Files to Dreambox”.



6. It will say Reload Settings or Reboot. Click “Reload settings on Dreambox”.

- You will now be able to select North American satellites and proceed to the next step.
- Anytime you change your satellite configuration settings, as we will explain in the next section, you will need to reload your Service List.

Section 8

Satellite Configuration

Multiple LNBs can be handled by the LNB on a fixed dish as with a T90 which can tune as many as 16 satellites.....



<http://www.dreamboxfornewbies.org/Aiming a Toroidal Dish - T90 and T55.pdf>. for help with aiming the T90.

Or a rotor which will turn a dish with a circular and linear LNB to tune every satellite within its arc.



A: Fixed Dish Configuration

We will provide you with an example to demonstrate how this should be done. This example will be for 4 LNBs connected to a 4x1 DiSEqC switch tuning satellites at 82, 91, 110, and 119 degrees.

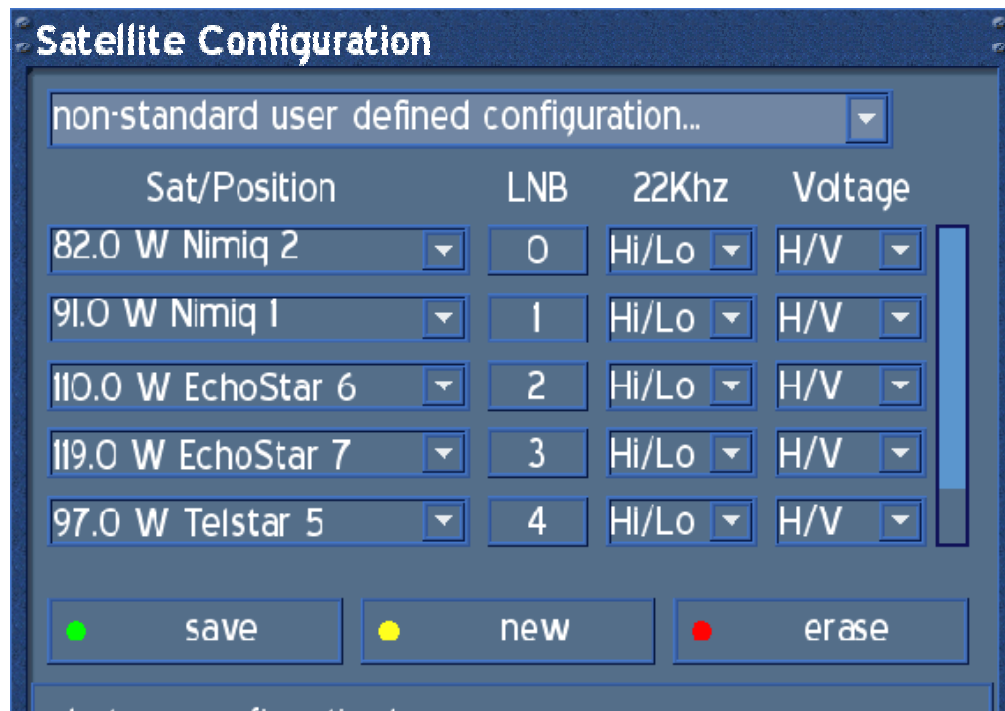
We will assume that you have your dish aligned correctly and that you have LNBs aimed at these 4 satellites connected by RG6 cables to a 4x1 switch.



1. Connect 82 to Input 1.
2. Connect 91 to Input 2.
3. Connect 110 to Input 3.
4. Connect 119 to Input 4.
5. Connect an RG6 cable to the “Receiver” output post on the switch and connect to the “In” post on the DreamBox

Procedure:

1. Using the remote control press “Menu” and go to Settings then Service Searching then Satellite Configuration to this screen.



2. Choose "**non-standard user defined configuration**" from the top drop-down menu.
3. Choose your desired satellite – 82 in this example.
4. Select **LNB0** and press the **OK** button. Do not make any other changes to this page.

LNB Configuration

Sat/LNB mapping: LNB 0

LOF/L: 0 9 7 5 0

LOF/H: 1 1 2 5 0

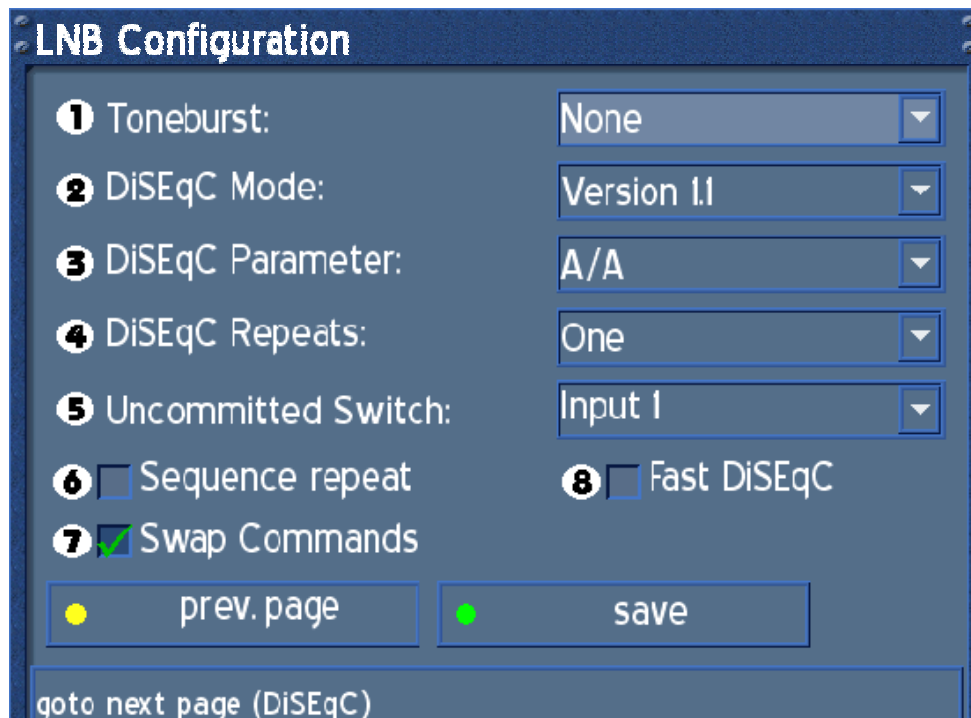
Threshold: 1 1 7 0 0

☐ increased voltage

● save ● next page

here you can change your sat/lbn mapping

5. At this new screen, change the **LOF/H** value to “**11250**”.
All other items should stay at their default values.
6. Press the **Blue** button to take you to the next page.



7. Change DiSEqC Mode to 1.0.
8. Change DiSEqC Parameter to A/A.
9. Press the **Green** button or arrow down to the “save” box and save the changes you have just made.
10. Press the **Yellow** button to add another satellite and repeat this procedure to add all 4 satellites with the following settings:

Satellite	LOF/H	Toneburst	DiSEqC Mode	DiSEqC Parameter
82	11250	None	1.0	A/A
91	11250	None	1.0	A/B
110	11250	None	1.0	B/A
119	11250	None	1.0	B/B

11. Press the **Green** button or arrow down to the “save” box and save the changes you have just made on the page that lists all the satellites to complete this configuration.
12. Now backup your hard work with [FlashWizard](#).

Now that you are an expert and want more than 4 satellites you may want to extrapolate these directions to 8 (or even more) satellites if you have a T90.

For 8 Satellite positions:

- 1 Spaun DiSEqC uncommitted switch - SUR 220F or 420F
- 2 Spaun DiSEqC switches - SAR 411F
- 8 LNBs

LNB	Toneburst	DiSEqC Mode	DiSEqC Parameter	Switch Input	Swap Command
0	None	1.1	A/A	1	+
1	None	1.1	A/B	1	+
2	None	1.1	B/A	1	+
3	None	1.1	B/B	1	+
4	None	1.1	A/A	2	+
5	None	1.1	A/B	2	+
6	None	1.1	B/A	2	+
7	None	1.1	B/B	2	+

Tips:

- LOF/H is 11250 for circular LNBs like we use for DISH, DirecTV, and Bell ExpressVu. (No, the DreamBox cannot receive DirecTV.
- LOF/H is 10600 or 10750 for linear LNBs like we use for 97, 105, and 121. (Standards are 10750; Universals are 10600)
- If your RG6 run is fairly long, adding 'Repeat' of 'one' on the page with DiSEqC 1.1 settings will help.

Go to <http://www.dreamboxfornewbies.org/wiring.htm> for diagrams explaining how to wire different combinations of satellites and LNBs with a fixed dish.

B. Rotor Dish Configuration

We will provide you with an example to demonstrate how this should be done. This example will be for 2 LNBs, one linear standard and one circular, connected to a 22kHz switch tuning satellites at 82, 91, 110, 119, 148, 97, 105, and 121 degrees.

Equipment:

1. 30 inch or larger dish with a circular LNB for R and L polarization and linear standard LNB for H and V polarization. A universal linear LNB will not work with the 22kHz switch.
2. 22kHz switch. (A DiSEqC switch will also work but a simple on and off switch such as a 22kHz switch will work just as well.)
3. Rotor. We recommend the Stab HH series. Some of the others lose position memory.

Procedure:

1. Mount the dish and make sure everything is level and plumb.
2. Install the linear LNB in the center of the dish.
3. Install the circular LNB just to the left of the linear LNB as you are looking at the front of the dish.
4. Connect the circular LNB to the 'OFF' pole of the switch and the linear LNB to the 'ON' pole of the switch.

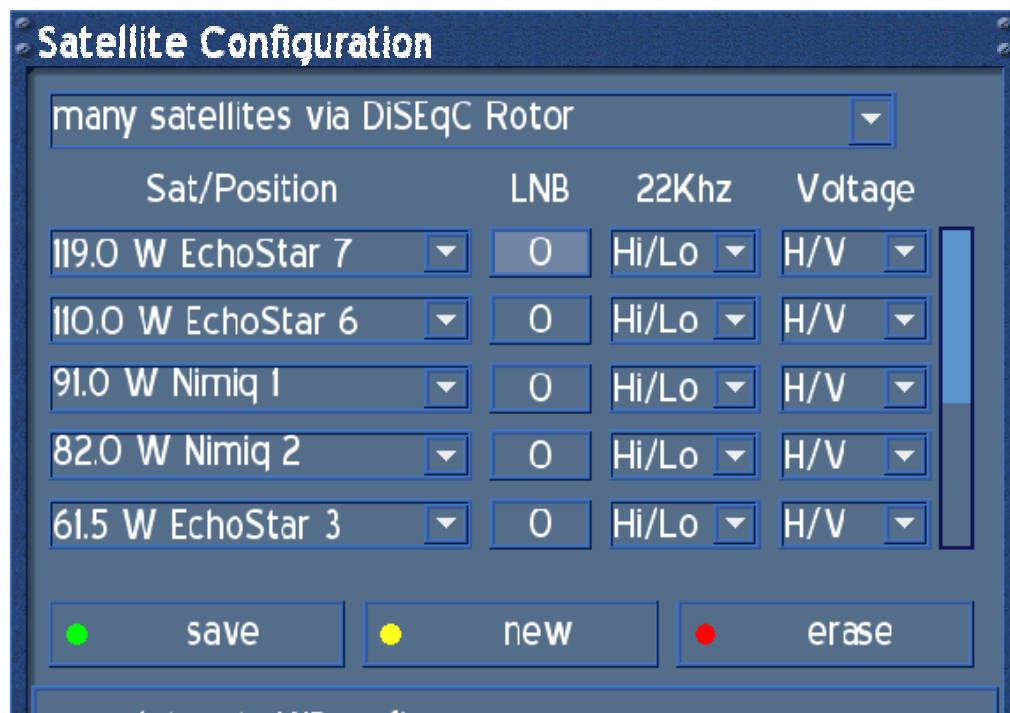


5. Connect the RG6 cable from the switch to the Rotor and another from the Rotor to the DreamBox.
6. Aim the dish in the approximate direction of your first satellite.

Satellite Configuration for those with Rotors

Procedure:

1. Using the remote control press “Menu” and go to Settings then Service Searching then Satellite Configuration.
2. Choose “**many satellites via DiSEqC Rotor**” from the top drop-down menu.
3. Let’s make the circular polarized LNB = LNB0 and the linear LNB = LNB1.
4. Choose your first desired satellite – 119W in this example because it has a very strong signal.



5. Select **LNB0** and press the **OK** button. Do not make any other changes to this page.
6. At this new screen, change the **LOF/H** value to “**11250**”. All other items should stay at their default values.

LNB Configuration

Sat/LNB mapping: LNB 0 ▾

LOF/L: 0 9 7 5 0

LOF/H: 1 1 2 5 0

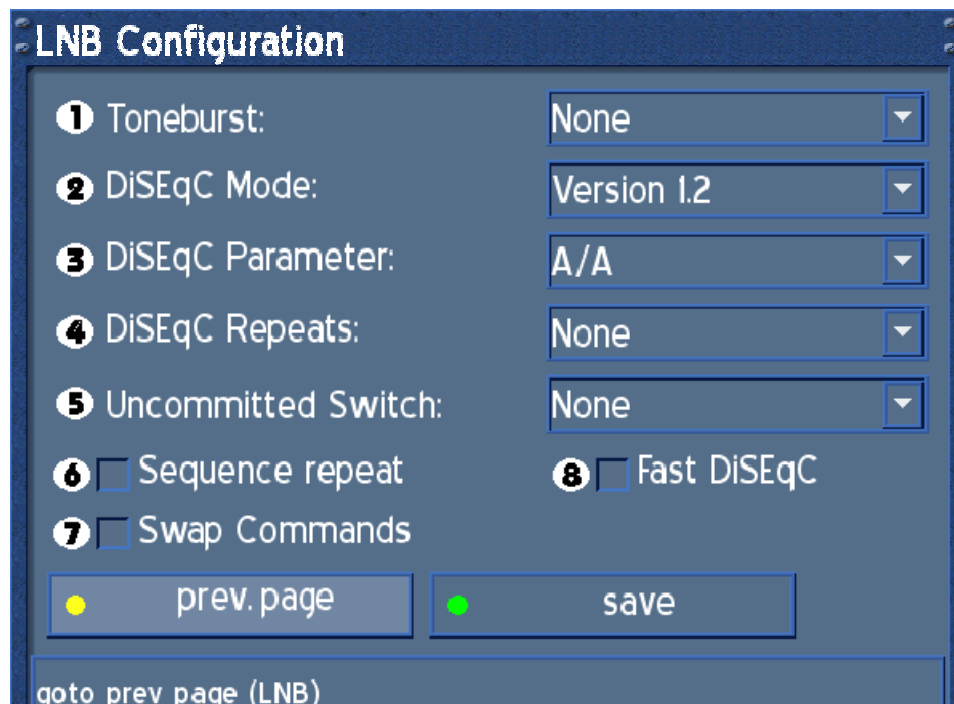
Threshold: 1 1 7 0 0

☐ increased voltage

● save ● next page

here you can change your sat/lnb mapping

7. Press the **Blue** button to take you to the next page.



8. Change DiSEqC Mode to 1.2.
9. Change DiSEqC Parameter to A/A.
10. Press the **Green** button or the down arrow button to the "Save" box and save the changes you have just made.
11. Press the **Yellow** button to add another satellite and repeat this procedure to add all of the satellites requiring circular LNBs (R or L polarization) with the following settings:

Satellite	22kHz	LOF/H	Toneburst	DiSEqC Mode	DiSEqC Parameter
61.5	Off	11250	None	1.2	A/A
82	Off	11250	None	1.2	A/A
91	Off	11250	None	1.2	A/A
110	Off	11250	None	1.2	A/A
119	Off	11250	None	1.2	A/A
148	Off	11250	None	1.2	A/A

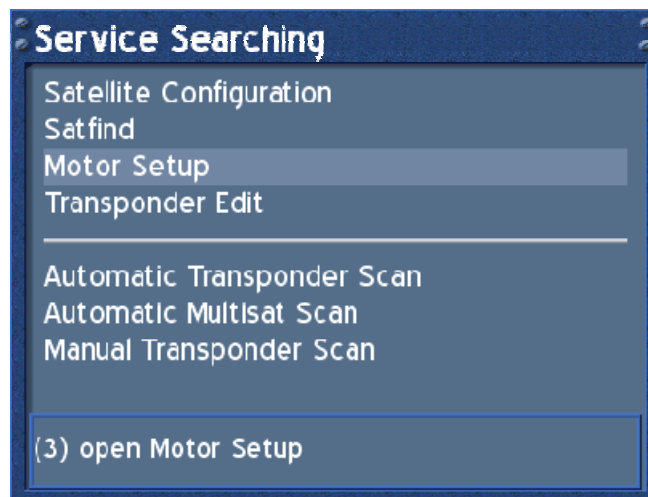
12. Then use the above procedure to add all of the

satellites requiring linear LNBS (V or H polarization).

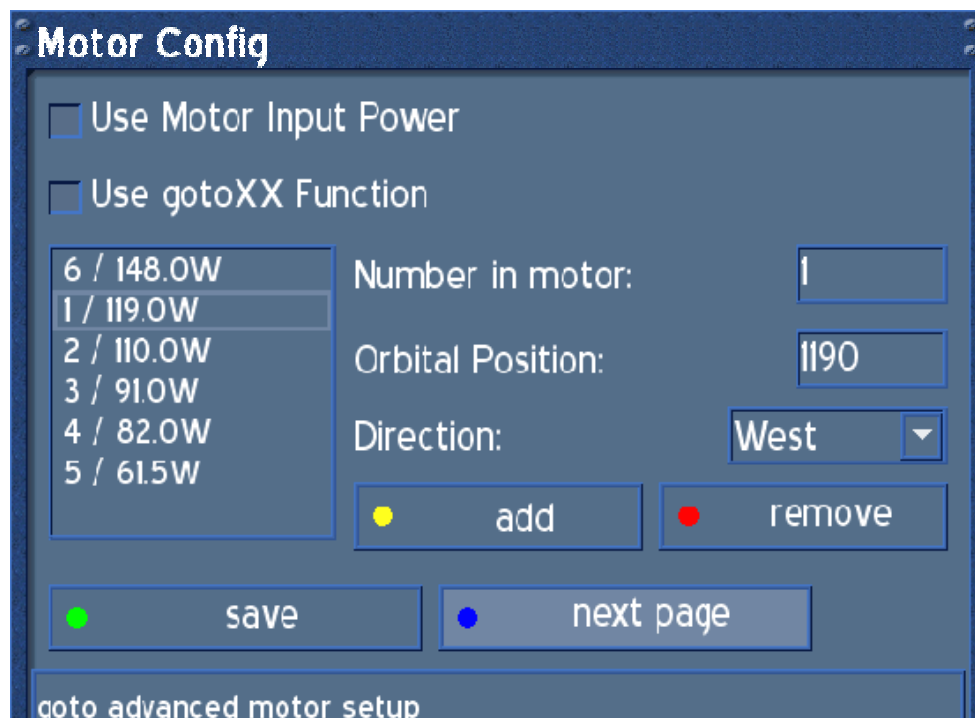
13. Use "10750" for the LOF/H.

Satellite	22kHz	LOF/H	Toneburst	DiSEqC Mode	DiSEqC Parameter
97	On	10750	None	1.2	A/A
105	On	10750	None	1.2	A/A
121	On	10750	None	1.2	A/A

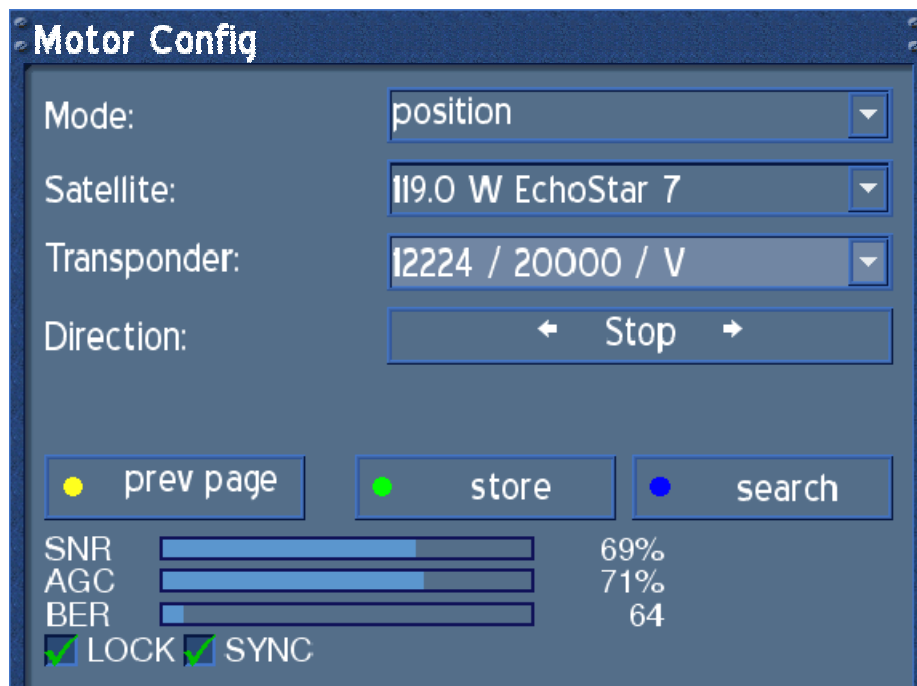
14. Press the **Green** button or the down arrow button to the "Save" box and save the changes you have just made.
15. Use the remote to select "Motor Setup".



16. You get a message that says you have more than one LNB. Press "OK".
17. Select "LNB 0".
18. Uncheck the "Use gotoXX Function"



19. Browse down to "Number in Motor" and enter "1".
20. Browse down to "Orbital Position" and enter "1190" for the 119W satellite.
21. Browse down to "Direction" and select "West" from the drop-down menu.
22. Press **Blue** button.



23. Browse down to "Mode" and select "position" from the drop-down menu.
24. Browse down to "Satellite" and select "119.0 W EchoStar 7" from the drop-down menu.
25. Browse down to "Transponder" and select "12239 / 20000 / H" from the drop-down menu.
26. Browse down to "Direction" and press the "left" or "right" arrow button on the remote to move the dish "one step" to the East or West.

Tip: If you hold the button down too long, the dish will turn to the furthest position to the east or west. You need to make sure you press short clicks and wait 4 seconds between each press of the remote button.

27. Keep turning the dish until you see the SNR reach its maximum for that satellite. You will need to adjust the elevation at the dish.
28. Once you reach the maximum press the **Green**

- button or the down arrow button to the “Store” box and store this position.
29. On the screen that comes up enter “1” in the “Storage Location” box and press the **Green** button or the down arrow button to the “Save” box and save the changes you have just made.
 30. Browse down to “Mode” and select “recalculate” from the drop-down menu.
 31. Press the **Green** button or the down arrow button to the “recalculate” box and save the changes you have just made.
 32. It will then ask “Are you sure?” Press the **Green** button or the down arrow button to the “Yes” box to save.
 33. Press the **Yellow** button or the down arrow button to the “prev page” box.
 34. Browse down to “Number in Motor” and enter “2”.
 35. Browse down to “Orbital Position” and enter “910” for 91W satellite.
 36. Browse down to “Direction” and select “West” from the drop-down menu.
 37. Press **Yellow** button to or the down arrow button to the “add” box.
 38. Repeat this procedure until all of your circularly polarized satellites are entered. In this example that would be: 82, 91, 110, 119, and 148.
 39. Press the “Exit” button and then select “Motor Setup”.
 40. You get a message that says you have more than one LNB. Press “OK”.
 41. Select “LNB 1”.
 42. Start over with “Step 32” above to enter the linearly polarized satellites. In this example that would be: 97, 105, and 121.
 43. You will now need to scan any satellites that are not listed in your DBNA service list.

Section 9

Using FlashWizard for Backups and Multiboot

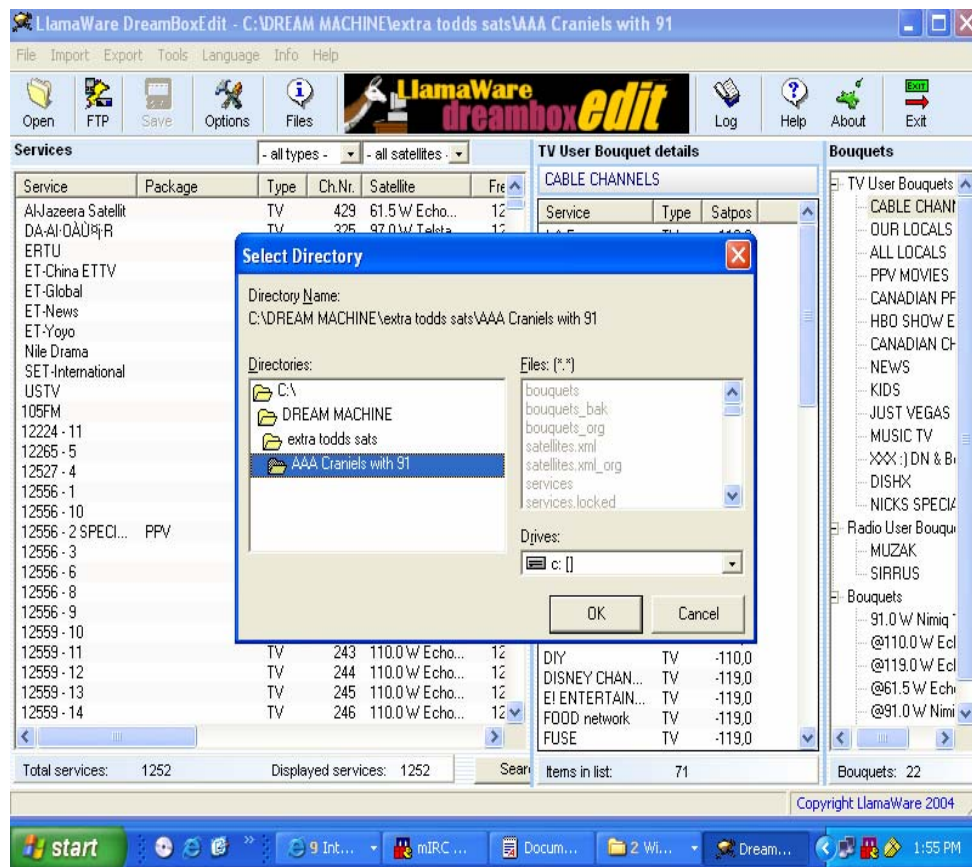
FlashWizard does not currently work with the DreamBox 7020.

Section 10

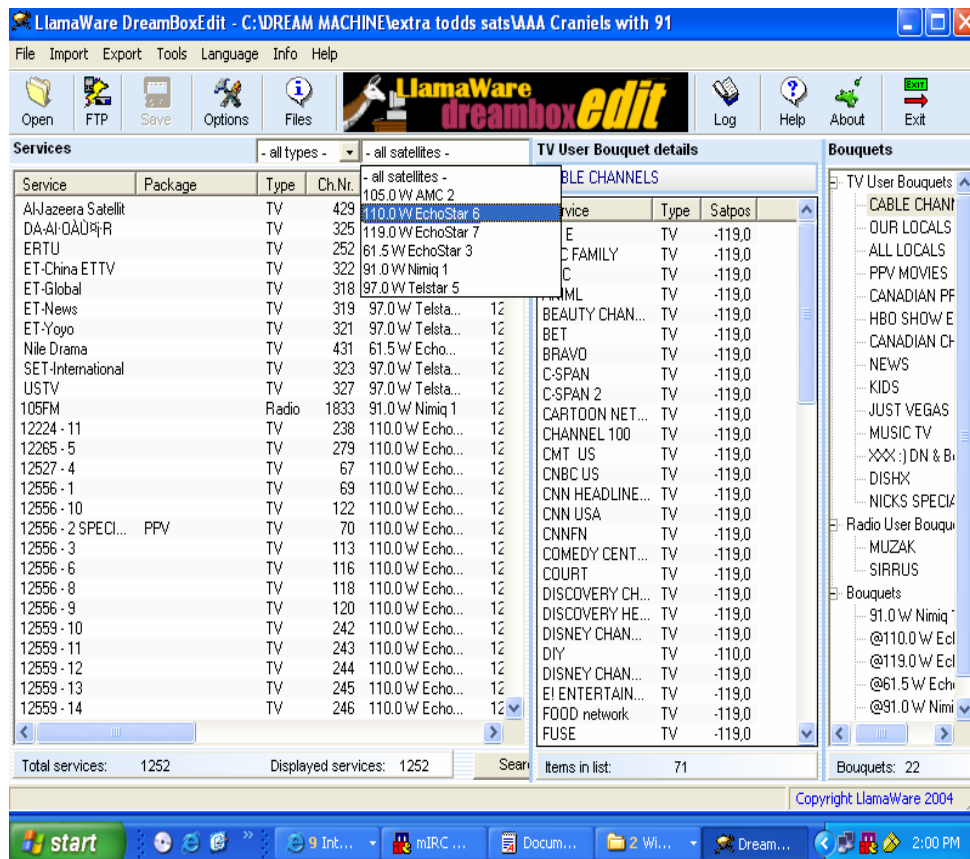
Adding Services Manually

Procedure:

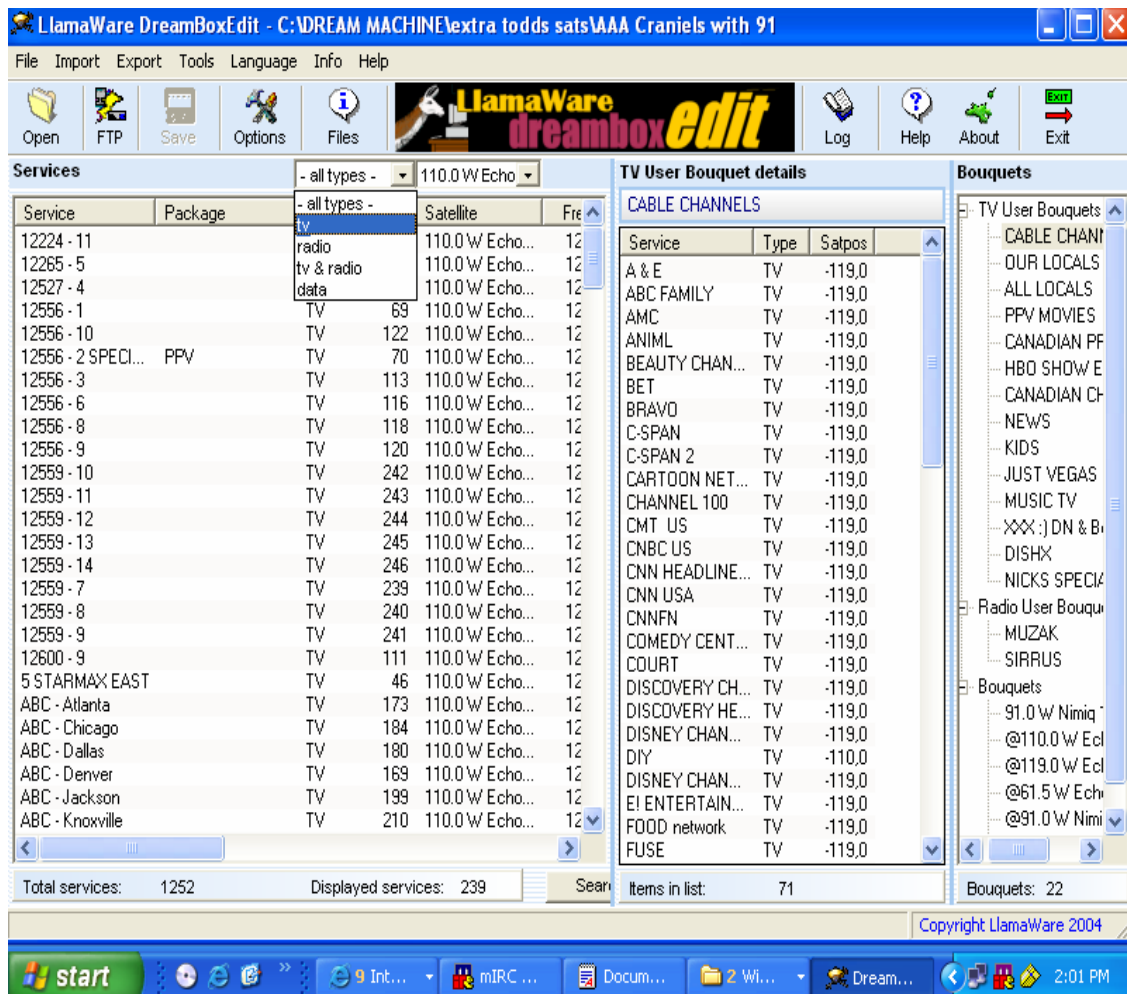
1. Start DreamBoxEdit and open your Service List. (This is the file with all your satellite information, such as satellites.xml, bouquets, etc.)



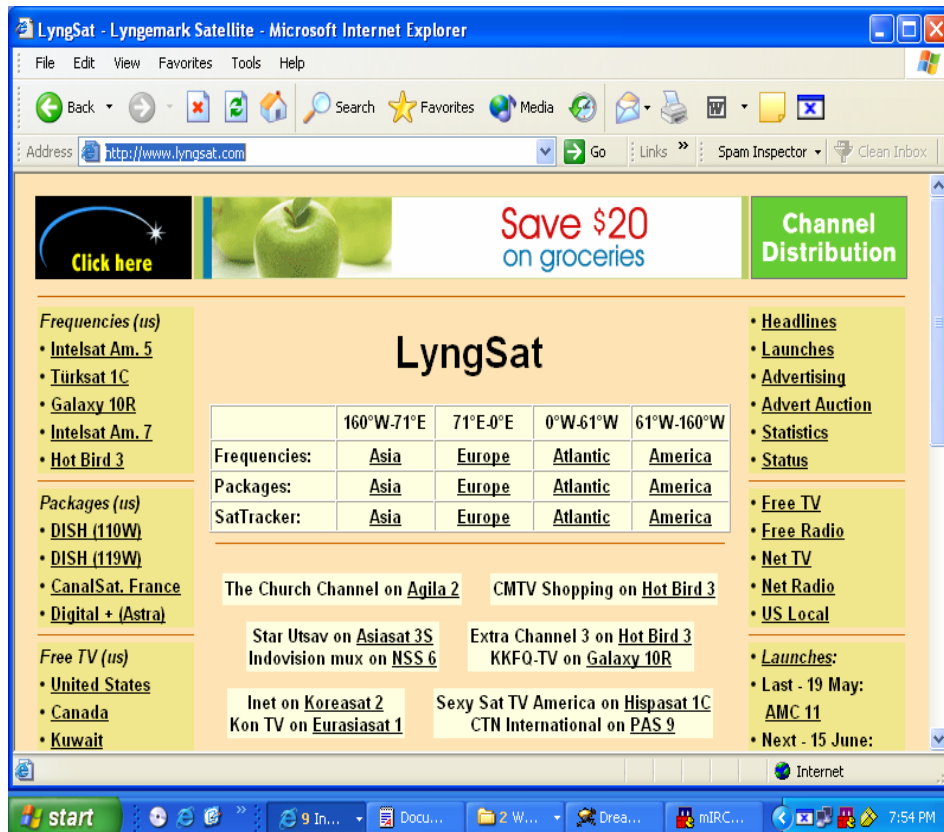
2. Choose the satellite of interest from the “satellites” drop-down menu.



- Choose "tv" from the "types" drop-down menu to make things easier to keep track of. (Select "Radio" if you want to add radio stations.)



4. Go to <http://www.lyngsat.com> to find the services information we need to tune a service. These pages contain "packages" or information about the services offered on each transponder of each satellite.



5. We are adding services from 110W so select Packages – America and click on 110.0 W EchoStar 6/8.

61.5°W	EchoStar 3	DISH Network	Freq. SID	040503
61.5°W	EchoStar 3	Sky Angel	Freq. SID	040310
61.5°W	Rainbow 1	Voorn	ChNo	040603
70.0°W	Brasilsat B1	Globosat	Freq. SID	030723
71.8°W	Nahuel 1	TDH - TV Directa al Hogar	Freq. ChNo	040130
82.0°W	Nimiq 2	ExpressVu	Freq. SID	040608
85.0°W	XM Roll	XM Radio	ChNo	
91.0°W	Nimiq 1	ExpressVu	Freq. SID	040529
95.0°W	Galaxy 3C	DirecTV Latin America	ChNo	040604
95.0°W	Galaxy 3C	DirecTV Brazil	ChNo	040605
99.0°W	Galaxy 4R	HITS	Freq. VC	040310
101.0°W	DirecTV 1R/2/4S	DirecTV USA	ChNo	040606
103.0°W	AMC 1	In Demand	Freq. VC	030929
105.0°W	AMC 2	DISH Network	Freq. SID	040608
107.3°W	Anik F1	Star Choice	Freq. VC ChNo	040505
109.8°W	DirecTV 6	DirecTV USA	ChNo	040122
110.0°W	EchoStar 6/8	DISH Network	Freq. SID	040531
111.1°W	Anik E2R	Star Choice	Freq. VC ChNo	030619
115.0°W	XM Rock	XM Radio	ChNo	
116.8°W	SatMex 5	PCTV	Freq. VC	040403
119.0°W	DirecTV 7S	DirecTV USA	ChNo	040607
119.0°W	EchoStar 7	DISH Network	Freq. SID	040528
121.0°W	EchoStar 9	DISH Network	Freq. SID	040606
123.0°W	Galaxy 10R	TVN Digital Entertainment	Freq. VC	040520
129.0°W	Intelsat Americas 7	In Demand	Freq. VC	030731
129.0°W	Intelsat Americas 7	OlympusSat	Freq. VC	040406
148.0°W	EchoStar 1/2	DISH Network	Freq. SID	040531
157.0°W	EchoStar 4	DISH Network	Freq. SID	040519

6. You will now see this screen:

DirectTV 6 & EchoStar 6/8 © Lyngemark Satellite, last updated 2004-06-08 - <http://www.lyngsat.com/110west.html>

Freq. Tp	Provider Name Channel Name	Video Encryption	SR - FEC SID - VPID	NID - TID Audio	Beam	Source Updated
12224 R tp 1	 DISH Network	A U P	DVB Nagravision 1 Nagravision 2	20000 - 5/6 4102-201	Conus	J Hotsenpiller 040311
	DISH 500	A		9900 6690 6691 E		
12239 L tp 2	 DISH Network	A P	DVB Nagravision 1 Nagravision 2	20000 - 5/6 4102-272	Central Florida	J Hotsenpiller 040402
12239 L tp 2	 DISH Network	A P	DVB Nagravision 1 Nagravision 2	20000 - 5/6 4102-262	Ohio	J Hotsenpiller 040401
12239 L tp 2	 DISH Network	A P	DVB Nagravision 1 Nagravision 2	20000 - 5/6 4102-252	Northern Plains	J Hotsenpiller 040323
12239 L tp 2	 DISH Network	A P	DVB Nagravision 1 Nagravision 2	20000 - 5/6 4102-282	Texas	J Hotsenpiller 040423
12239 L tp 2	 DISH Network	A P	DVB Nagravision 1 Nagravision 2	20000 - 5/6 4102-242	South California	S Noll 031203
12253 R tp 3	 DISH Network	A U P	DVB Nagravision 1 Nagravision 2	20000 - 5/6 4102-203	Conus	J Hotsenpiller 040117
12268 L tp 4	 DISH Network	A P	DVB Nagravision 1 Nagravision 2	20000 - 5/6 4102-264	Northeast	J Hotsenpiller 040528

7. Now you click on any of the "P"s, for programs offered. This will bring up a list on the 110W DISH Network for all services offered.

Freq. Tp	Channel Name	Enc. system	SID	VPID	APID	Beam	Source Updated
12224 R tp 1 SR 20000 FEC 5/6	 The History Channel International	A	Nagravision 1 Nagravision 2	121	4130	4131 E	J Hotsenpiller 030312
	 Mystery East	A	Nagravision 1 Nagravision 2	344	4642	4643 E	J Hotsenpiller 000331
	 True Stories East	A	Nagravision 1 Nagravision 2	345	4898	4899 E	J Hotsenpiller 000331
	 Love Stories East	A	Nagravision 1 Nagravision 2	346	4386	4387 E	J Hotsenpiller 000331
	 WAM! East	A	Nagravision 1 Nagravision 2	347	5154	5155 E	J Hotsenpiller 000331
	 Univisión Oeste	A	Nagravision 1 Nagravision 2	828	5410	5411 Sp	J Hotsenpiller 030522
	 TeleFutura Este	A	Nagravision 1 Nagravision 2	830	5666	5667 Sp	J Hotsenpiller 030522
	 TeleFutura Oeste	A	Nagravision 1 Nagravision 2	831	5922	5923 Sp	J Hotsenpiller 030522
	 De Pelicula USA	A	Nagravision 1 Nagravision 2	862	6178	6179 Sp	J Hotsenpiller 030522
	 De Pelicula Clásico	A	Nagravision 1 Nagravision 2	863	6434	6435 Sp	J Hotsenpiller 030522
	 DISH 500	A	F	9900	6690	6691 E	J Hotsenpiller 040211
	 WTOG-TV (UPN - Tampa)	A	Nagravision 1 Nagravision 2	8695		E	M2 021015
	 WEDU-TV (PBS - Tampa)	A	Nagravision 1 Nagravision 2	8696		E	M2 021015

8. The 110W satellite carries two types of beams- direct Spot beams indicated by a named location and Conus beams. Conus is just simply satellite info that is transmitted all over North America and Spot beams are transmitted over the geographical location noted. (Think of a spot as a beam from a flashlight; it just shines over a small area where you point it.)

9. As an example, let's add services from the Southern California Spot beam; the procedure is the same for Conus.

So scroll down until you see Southern California.

12239 L tp 2 SR 20000 FEC 5/6		KBAK-TV (CBS - Bakersfield)		Nagravision 1 Nagravision 2	7301	6178	6179 E	P Smith 031026
		KGET-TV (NBC - Bakersfield)		Nagravision 1 Nagravision 2	7302	6434	6435 E	P Smith 031026
		KBFX-LP (FOX - Bakersfield)		Nagravision 1 Nagravision 2	7303	6690	6691 E	S Noll 031203
		KUIV-TV (UPN - Bakersfield)		Nagravision 1 Nagravision 2	7305	6946	6947 E	P Smith 031026
		KTNV-TV (ABC - Las Vegas)	A	Nagravision 1 Nagravision 2	9030	4130	4131 E	P Smith 031018
		KLAS-TV (CBS - Las Vegas)	A	Nagravision 1 Nagravision 2	9031	4386	4387 E	P Smith 031018
		KVVU-TV (FOX - Las Vegas)	A	Nagravision 1 Nagravision 2	9033	4898	4899 E	P Smith 031018
		KVVU-TV (WB - Las Vegas)	A	Nagravision 1 Nagravision 2	9034	5154	5155 E	P Smith 031018
		KLVX-TV (PBS - Las Vegas)	A	Nagravision 1 Nagravision 2	9036	5410	5411 E	P Smith 031018
		KFBI-TV (Las Vegas)	A	Nagravision 1 Nagravision 2	9039	5666	5667 E	P Smith 031018
		Auction TV		Nagravision 1 Nagravision 2	217	6434	6435 E	J Hotsenpiller 040117
		DISH-on-Demand PPV	A	Nagravision 1 Nagravision 2	525	4130	4131 E	J Hotsenpiller 021220
		DISH-on-Demand PPV	A	Nagravision 1 Nagravision 2	526	4386	4387 E	J Hotsenpiller 021215
		DISH-on-Demand PPV	A	Nagravision 1 Nagravision 2	527	4642	4643 E	J Hotsenpiller 021215

10. We need the following information about our service:

- The station name.
- TID – transponder ID
- Frequency of the transponder
- Symbolrate
- FEC
- Polarization
- SID – Signal Identification Number
- NID – Network Identification Number

11. Lets add "KGET TV" in Bakersfield, a NBC station, as our service.

- Station name is NBC KGET-TV BAKERSFIELD.
- The TID we need is NOT the one on the left hand side of the list. The TID is 242 NOT 2. I will explain later.
- The Frequency of the transponder is on the left hand side of the list followed by a L. In this case the frequency is 12239.

- d. The Symbolrate is on the left hand side of the list, in this case the number is 20000.
 - e. The FEC number is on the left hand side of the list. In this example the number is 5/6.
 - f. The Polarization is on the left hand side of the list, right next to the frequency number, either an "R" or "L" in this case its "L".
 - g. The SID is in this list to the type of encryption. This SID is 7302.
 - h. The NID is 4102 for satellite 110W.
- The TID for Spot Beams is found on the page prior to the page that shows Station Names. Look at Frequency 12239 with the Spot of Southern California on this page again. The circled values give us our NID (Network ID) and our true TID.
 - Your EPG (Electronic Program Guide) will not work if you don't have these correct values.
 - The NID stays the same for the entire satellite. You can get the values here or on a list in our forum.

DirectTV 6 & EchoStar 6/8 at 110.0° W - LyngSat - Microsoft Internet Explorer

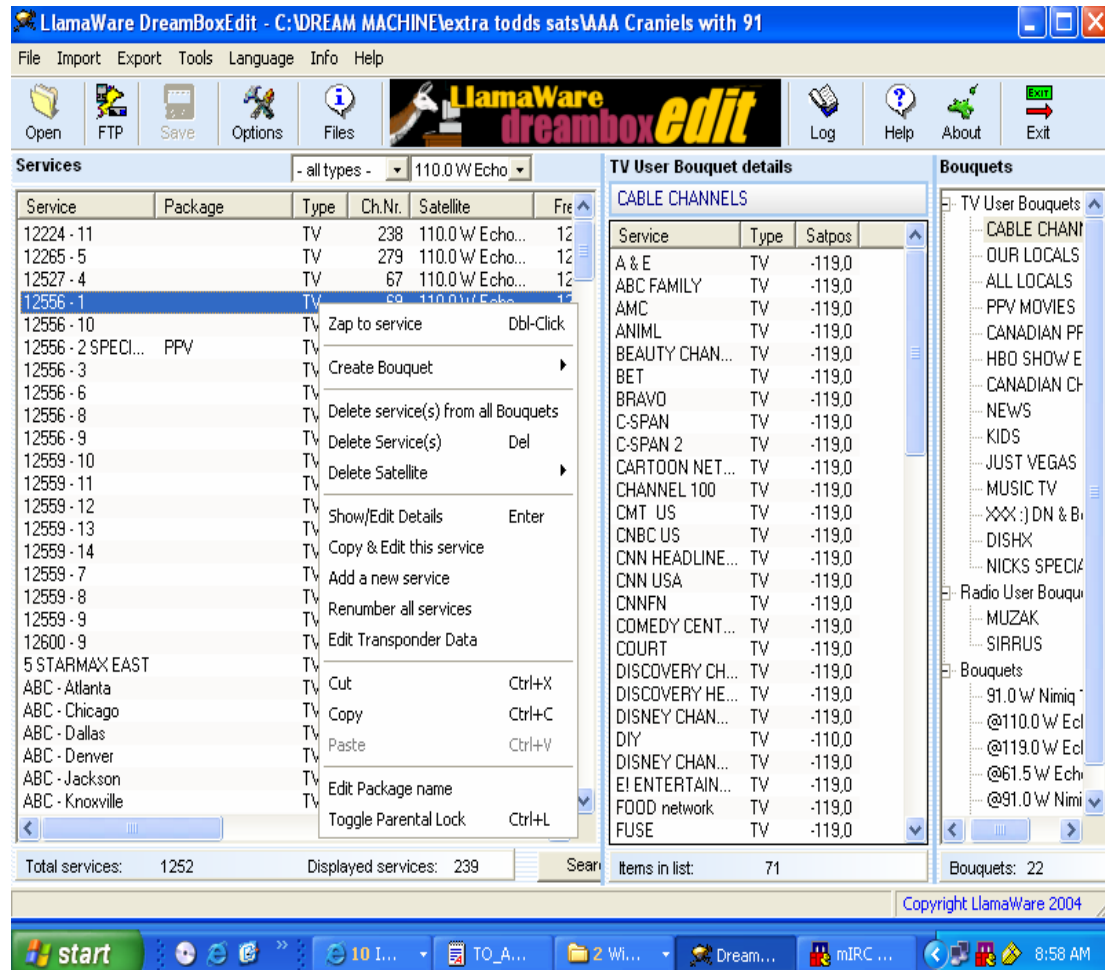
Address: <http://www.lyngsat.com/110west.html>

DirectTV 6 & EchoStar 6/8 © Lyngemark Satellite, last updated 2004-06-08 - <http://www.lyngsat.com/110west.html>

Freq. Tp	Provider Name Channel Name	Video Encryption	SR - FEC SID - VPID	NID - TID Audio	Beam	Source Updated
12224 R tp 1	DISH Network DISH 500	AUP DVB Nagravision 1 Nagravision 2	20000 - 5/6 9900 6690	4102-201 6691 E	Conus	J Hotsenpiller 040311
12239 L tp 2	DISH Network	AP DVB Nagravision 1 Nagravision 2	20000 - 5/6	4102-272	Central Florida	J Hotsenpiller 040402
12239 L tp 2	DISH Network	AP DVB Nagravision 1 Nagravision 2	20000 - 5/6	4102-262	Ohio	J Hotsenpiller 040401
12239 L tp 2	DISH Network	AP DVB Nagravision 1 Nagravision 2	20000 - 5/6	4102-252	Northern Plains	J Hotsenpiller 040323
12239 L tp 2	DISH Network	AP DVB Nagravision 1 Nagravision 2	20000 - 5/6	4102-282	Texas	J Hotsenpiller 040423
12239 L tp 2	DISH Network	AP DVB Nagravision 1 Nagravision 2	20000 - 5/6	4102-242	South California	S Noll 031203
12253 R tp 3	DISH Network	AUP DVB Nagravision 1 Nagravision 2	20000 - 5/6	4102-203	Conus	J Hotsenpiller 040117
12268 L tp 4	DISH Network	AP DVB Nagravision 1 Nagravision 2	20000 - 5/6	4102-264	Northeast	J Hotsenpiller 040528

Internet

12. Start DreamBoxEdit.
13. Point your mouse on any service listed on the left hand side and right click.
14. A drop down menu will come up:



15. Select "Add a new service" and you will see this screen.

Service Details

Transponder Data

Satellite Position *

Transponder ID *

Network ID *

Namespace *

Frequency * Polarisation *

Symbolrate * FEC *

Service Data

Name *

Package *

Service Type * (1: TV, 2: Radio, other: data)

Service ID *

Parental Lock *

Number *

PID's

Video Audio Teletext PCR AC3

Flags

Below options affect the way the Dreambox is handling this service

☐ K (Keep): Do not automatically update the service's parameters (No DVB)

☐ H (Hide): don't show this service in the 'All Services' list (Don't Show)

15. Start at the top and ...

- Enter "Satellite Position" which is 110 in our example.
- Enter "Transponder ID" - 242.
- Enter "Network ID" - 4102.
- Leave "Namespace" blank for now, we will deal with that number after we enter all the other data.
- "Frequency" is 12239 so enter 12239000.
- "Symbolrate" is 20000 so enter 20000000.
- Choose "Horizontal" for the "Polarization".

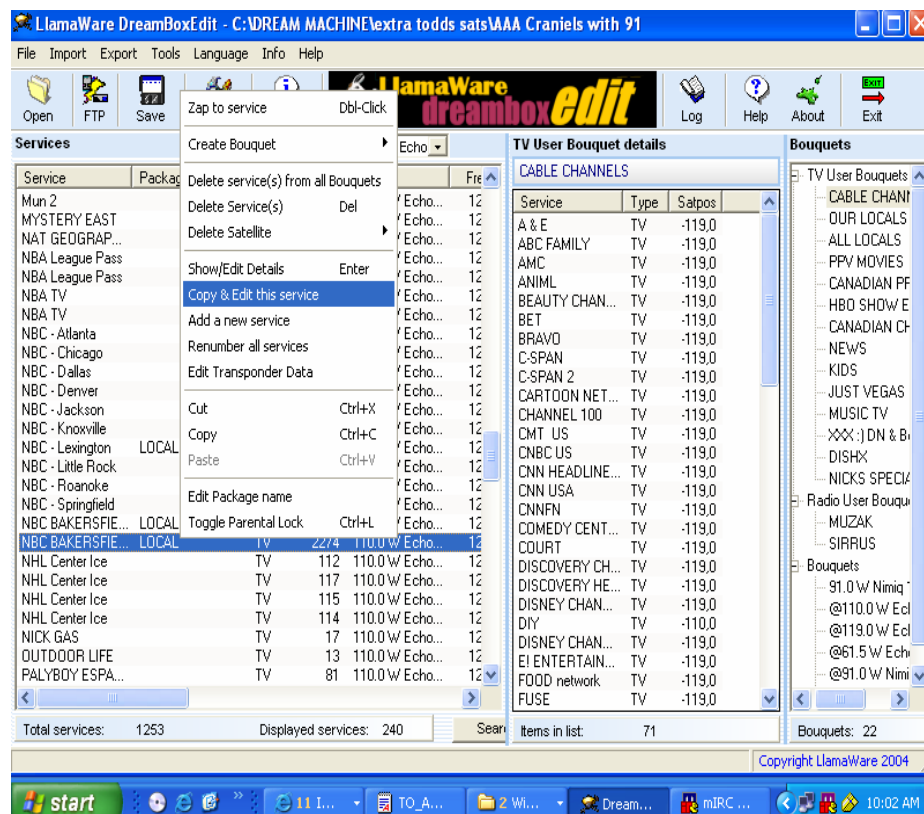
Tip: The LNBs that we use for DISH Network, Bell ExpressVu and DirecTV are circular LNBs so the polarization is "R" or "L". In DreamBoxEdit "R" = "Vertical" and "L" = "Horizontal".

- Choose 5/6 for "FEC".
- Enter "Name" as "NBC BAKERSFIELD".
- "Package" can be named anything you want like "Locals".

- k. Enter "1" for TV at "Service Type".
 - l. Enter "7302" for "Service ID".
 - m. Leave "Number" alone.
 - n. Now go back up and click "Calculate Namespace".
 - o. Click "Add" and you are done.
 - p. The PIDs are for adding AC3 or Dolby Sound. There is more in the forum about Dolby sound.
16. Click "Save".
 17. Now send this new list to your DreamBox by using DreamBoxEdit as described in Section 7. (Click "FTP" and then "Send Files to DreamBox" and then "Reload".

Adding Additional Services to the Same Transponder and Satellite

1. If we want to add another service from transponder 2 with TID of 242 like FOX Bakersfield we would highlight NBC Bakersfield.
2. Right click on NBC Bakersfield and select "Copy & Edit this service".



3. Now just enter the correct name and SID for the new service.
4. Click “Add” and you are done with this service.

Section 11

NFS Drives and Recording

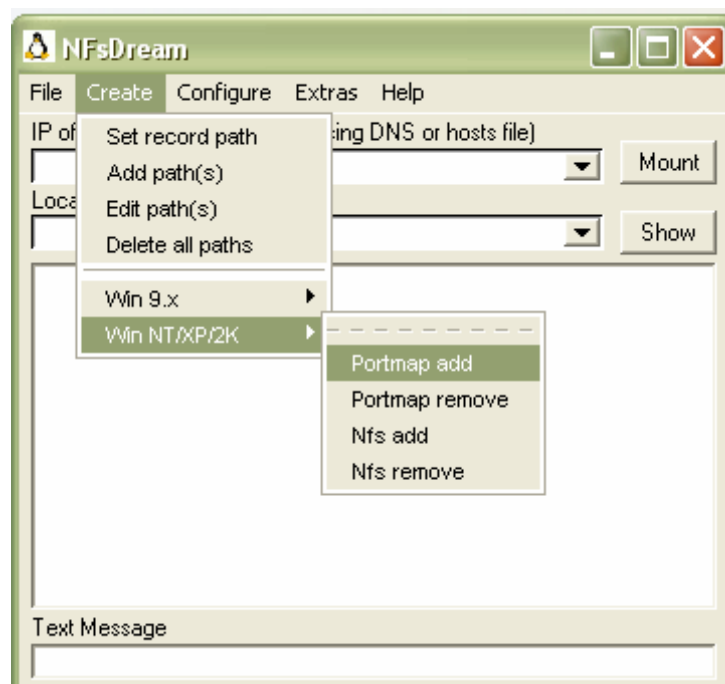
An NFS Drive will allow you to record movies on any drive that you configure on your network. There is no need to install a hard drive in your DreamBox if you use this technique.

Software needed:

1. NFSDream 1.05 to make the NFS install easier. You can do it manually.
2. TrueGrid NFS 1.1

Tip:

- If you make a mistake installing NFS you will need to Delete all paths, Portmap remove, and NFS remove. You will need to delete any files in the “etc” folder that you make in the Windows root directory and delete the “Movie” folder that was made on your target drive. Reboot your computer and start over with the directions below.

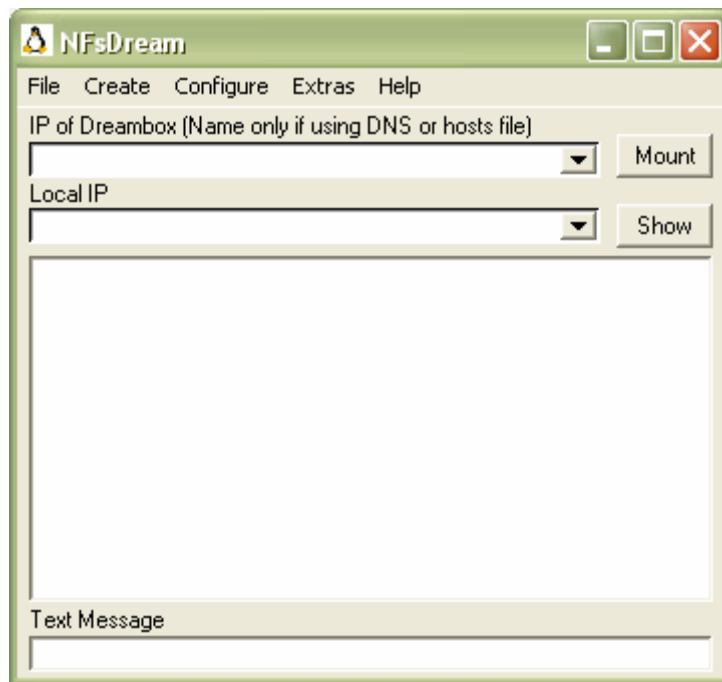


Configuring Your PC

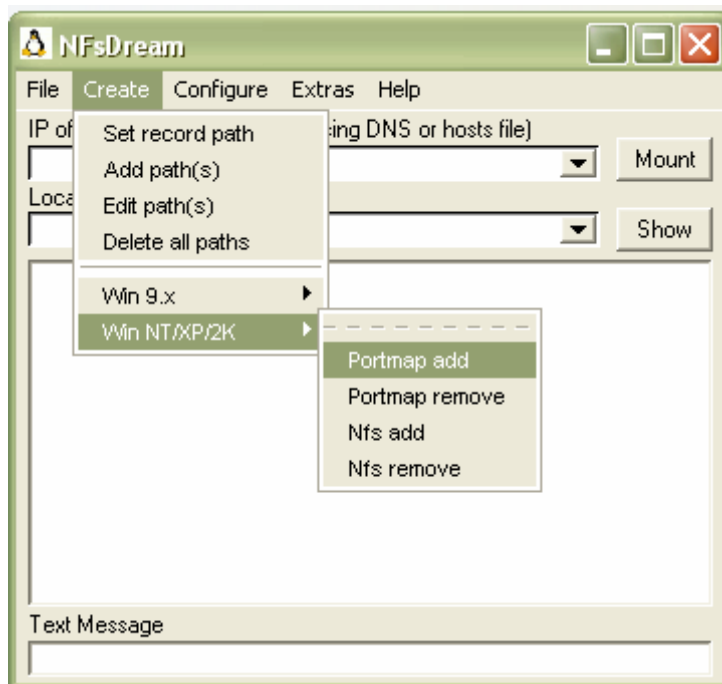
1. Download NFSDream and TueGrid NFS 1.1. It can be found on our forum as well as other places.
2. Extract the NFSDream file to a folder.
3. Create a new folder within the folder you extracted the NFSDream file to called nfs.
4. Extract the TrueGrid NFS server files to the folder you created called nfs.

Example: 

5. Create a folder in your Systemroot directory called 'etc'. Your Systemroot directory is where you have installed your operating system, for example, Windows or Winnt. (NFSDream will use this folder to copy two files, exports and rpc, later on in the process.)
 - a. You can do this easily by opening a Command (DOS) prompt and typing the following:
 1. 'cd %systemroot%'
 2. 'md etc'
 - b. Or you can use regular Windows commands to make this new folder.
6. Start NFSDream by double clicking on the NFSDream icon and you will see this screen.



7. Select “Create” then “Win NT/XP/2K” then “Portmap Add” and then Create” again, then “Win NT/XP/2K” and finally “Nfs Add”.



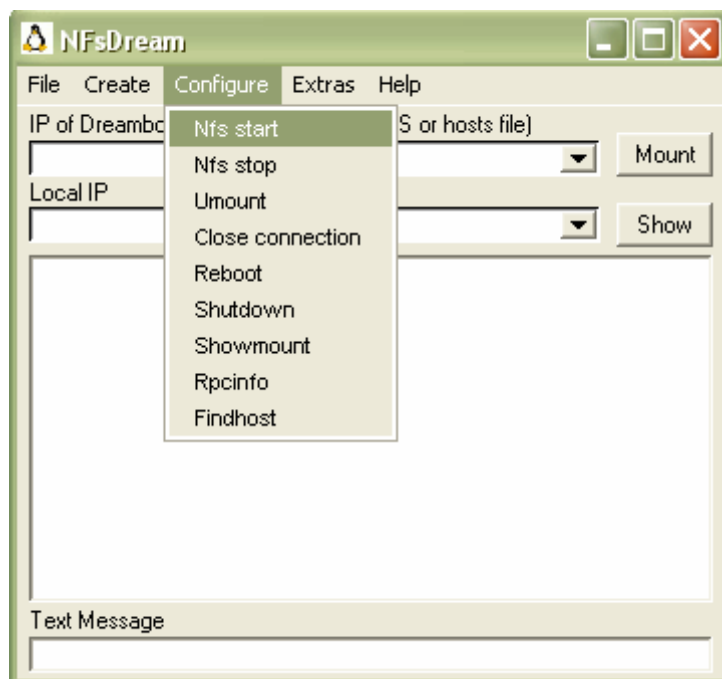
8. “Create” then “Set record path” and browse to the drive and folder where you plan to mount the NFS Drive.

When you do this, you are telling the NFS server to publish a share called /dreambox which is actually pointing to the folder you selected.

You will also notice there is a new folder within the location you chose called "movie". This is where all recordings will be stored. Do not delete this folder.

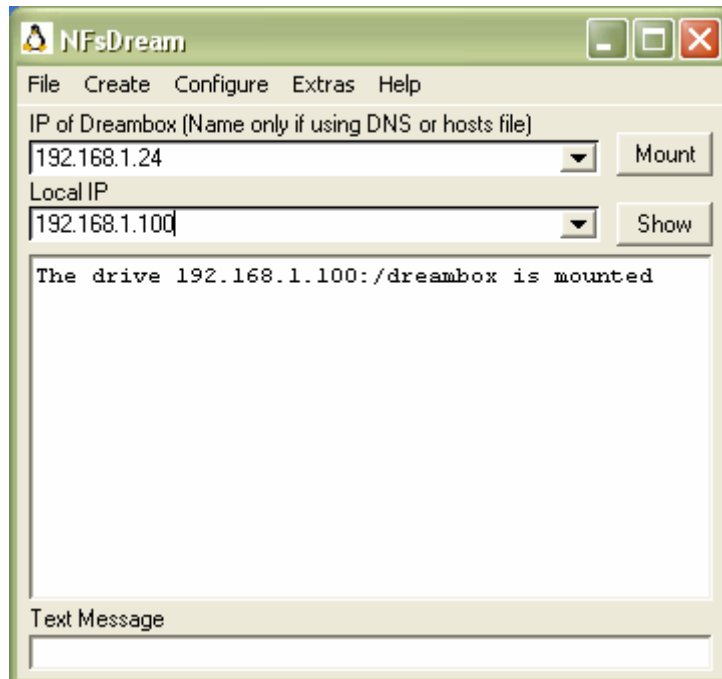


9. Select "Configure" and then "Nfs start". Don't worry if you see the message "nfs service is (already) started". This is normal.



10. In the top line box, labeled "IP of Dreambox" enter the IP address of your DreamBox.

11. In the next line box down, enter the IP address of the machine where NFSDream is installed.



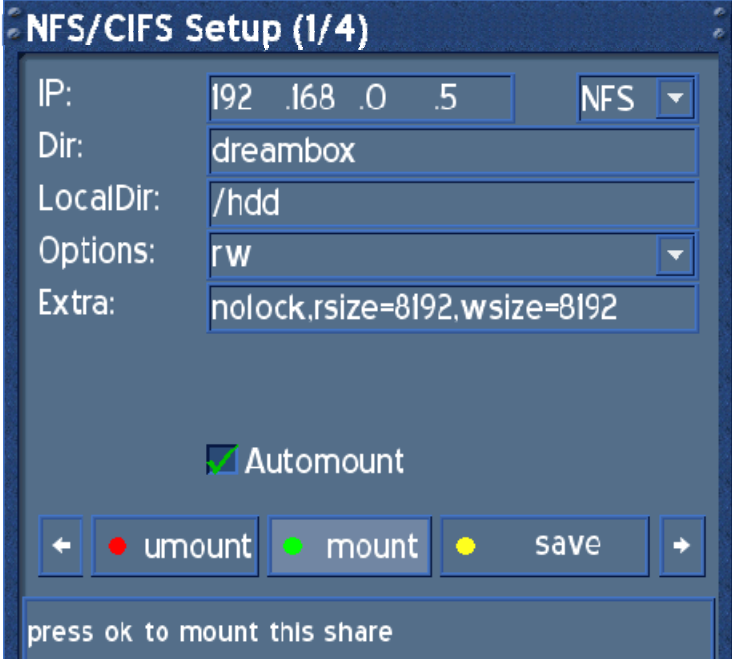
12. Once both fields have been populated, press the “Mount” button.

Configuring your DreamBox

There are three methods for configuring your DreamBox: One using the DreamBox remote, another using FlashWizard Pro 5.0 and a third using an init file but all methods require setting up NFS. I will discuss the first two here.

1. Press “MENU” on the remote and go to Settings then down to “Expert Setup” and then to “Communication Setup”. Press the **Blue** button on the remote to select “mounts”.
2. Enter the following information:
 - a. The IP of the PC housing the NFS drive in the “IP:” box.
 - b. Make sure “NFS” is showing in the drop down box.
 - c. “dreambox” in the “Dir:” box.
 - d. “/hdd” in the “LocalDir:” box
 - e. Leave “rw” in the “Options:” box.
 - f. Don’t change the value in the “Extra” box.

g. Make sure “Automount” is checked.



The image shows a dialog box titled "NFS/CIFS Setup (1/4)". It contains several input fields and a checkbox. The "IP:" field is set to "192 .168 .0 .5" and the "Dir:" field is set to "dreambox". The "LocalDir:" field is set to "/hdd". The "Options:" field is set to "rw" and the "Extra:" field is set to "nolock,rsiz=8192,wsiz=8192". The "Automount" checkbox is checked. At the bottom, there are four buttons: a left arrow, a red dot followed by "umount", a green dot followed by "mount", a yellow dot followed by "save", and a right arrow. Below the buttons, there is a text box that says "press ok to mount this share".

NFS/CIFS Setup (1/4)

IP: 192 .168 .0 .5 NFS ▾

Dir: dreambox

LocalDir: /hdd

Options: rw ▾

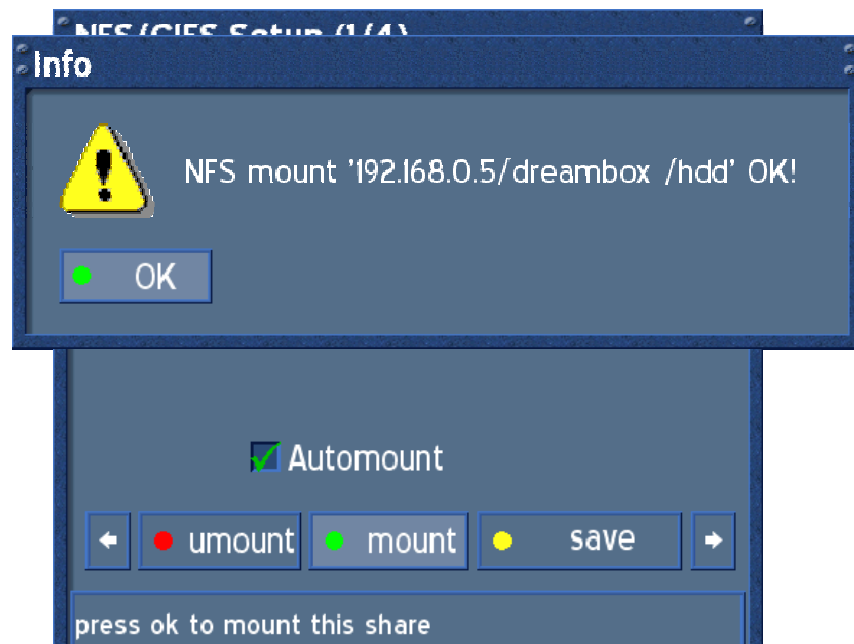
Extra: nolock,rsiz=8192,wsiz=8192

☒ Automount

← ● umount ● mount ● save →

press ok to mount this share

h. Press the **Green** button on the remote to mount the drive.



i. Press the **Yellow** button to save the mount.

To make a recording:

Press the "VIDEO" button on the remote.

Then press the "RADIO" button with the red dot under it to identify its secondary function.

The additional buttons in the same location will control tasks such as Stop, Play, Rewind and Fast Forward. Just match them up with the controls on the image below.



Section 12

Emus and Encryption

The emu plugins allow the decryption of encrypted channels such as DISH Network and Bell ExpressVu. These two use Nagra 1 and Nagra 2 encryption technology. Nagra 2 is not publicly hacked.

Commonly used emu plugins are:

- Radegast
- Evocamd (Only 5.5 and higher is autoupdating keys now.)
- Newcamd (Only 6.01 is Autoupdating keys now.)
- SCAM
- CAMD3
- CAMX

Keys are never included with an image. The key requirements are different for different emu's.

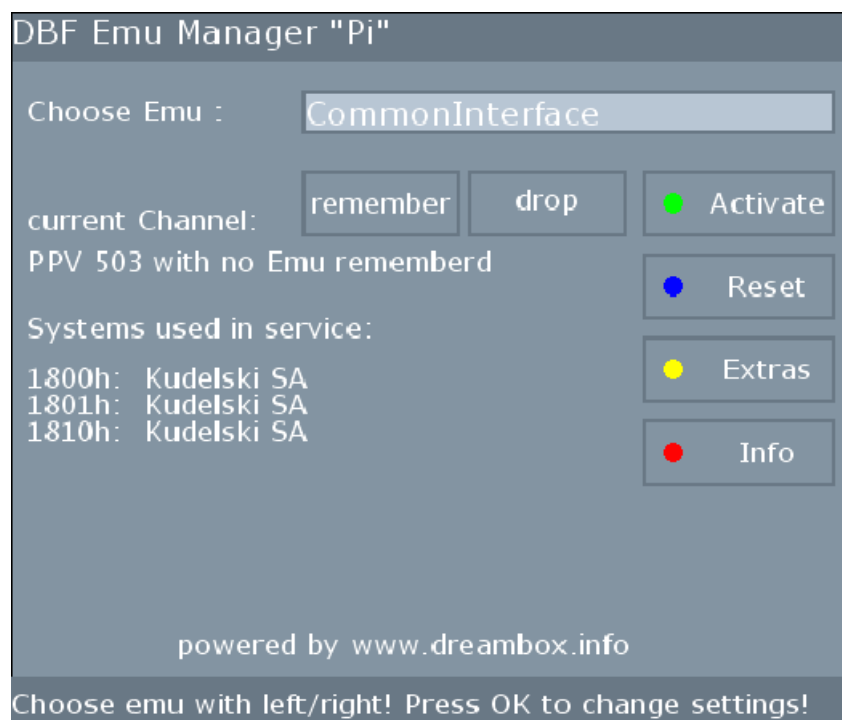
Radegast uses only **SoftCam.Key** and **AutoRoll.Key**.

Evocamd uses four files in the “/var/keys” folder and three files in the “/var/scce” folder.

Newcamd uses ten files in the “/var/tuxbox/scce” folder not “/var/scce” and none in the “/var/keys” folder. You can include all 13 nagra files and the other 3 key files if you would like.

You must select the Emu while in the TV mode trying to watch a channel if using the Pi images. (DBNA comes with Newcamd in the latest images and evocamd in the earlier images. There is only one emu in the DBNA images so no Emu Manager is included.)

Press the **Blue** button to select the Emu Manager.



Highlight the Emu box and select the Emu of your choice and press the **Green** button to activate it. You may remember different Emus per channel or bouquet.

Section 13

Installing Addons including the EMUs

The Pi image contains an automatic installer of Addons including the emus.

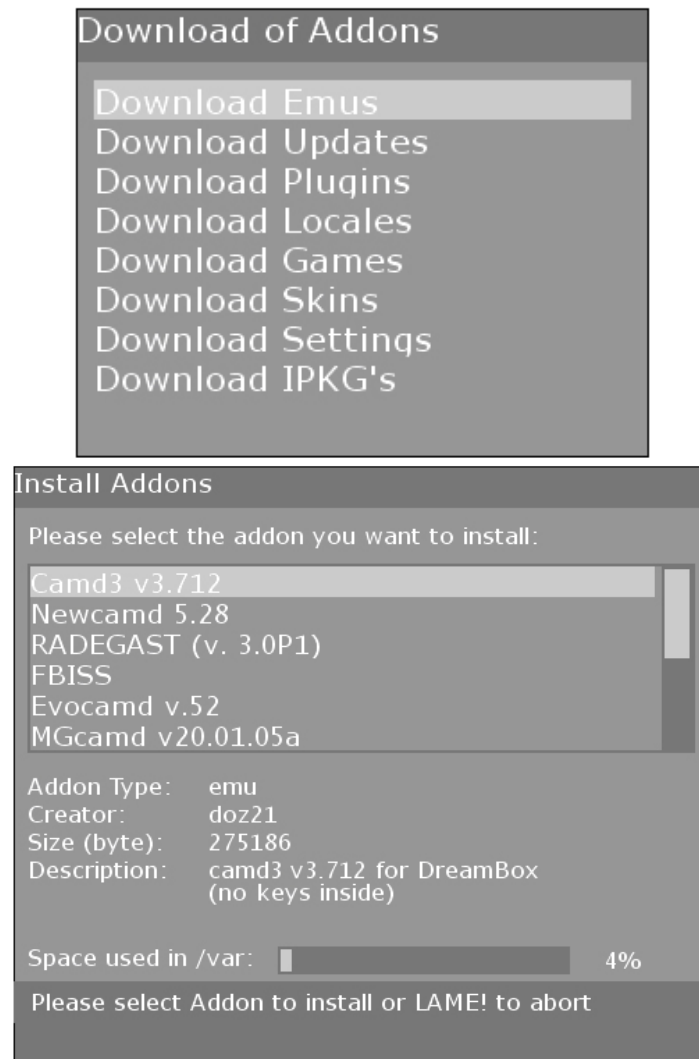
Go to Menu and select Extras:



Select Install Addons:



Select the Addon of your choice including emus:



Alternative: You can install these emus manually with the “Install Addons manually” section above by downloading the Pi Softcam file from <http://www.dbnation.tv/showthread.php?t=19>. This is necessary only when the Pi image server is down or not updated.

Note: To install Newcamd 6.01 right now you will need to FTP 2 files to the DreamBox with DCC send.

1. Download Newcamd 6.01 from www.dreamboxworld.com and unzip.
2. Browse to the Newcamd\libcamdio\dreambox folder where you unzipped the download on your PC and FTP “libcamdio.so.0” to /var/lib on your DreamBox. Do the same with libcrypto.so.0.9.7 which can be found on your PC in Newcamd\libcrypto\ppc.

3. Be sure to overwrite the key files found in /var/tuxbox/scce with new keys or Newcamd will not work.

Section 14

Scanning Satellites

You will need to scan any satellite of interest that is not listing in the DB Nation Service List. Any information about a specific satellite contained in a service list will be deleted and replaced by your scan of that same satellite.

Tip: Current images will not scan DISH at all and scan Bell ExpressVu poorly. Use the DB Nation Service List if possible.

Procedure:

1. Press the "Menu" button to bring up the toolbar at the bottom of the screen. Look for the "Setup" icon and press OK. Go to "Service Searching" then "Automatic Transponder Scan".
2. Scroll down to "Network" and select you satellite of interest from the drop down menu.
3. Press the **Green** button or the down arrow button to the "start scan" box and begin the scan.
4. Press the "Exit" button on the remote when the scan is done and it will ask if you want to "scan another Satellite". Press the **Green** button or the "OK" button scan another. Press the **Red** button or the right arrow button to the "No" box to end scanning.

Section 14

Primer On Skins

Skins are templates that control the look of your DreamBox's screen.

There are simple skins without folder icons.



There are more advanced skins with folders filled with (*.png) pictures.



Some skins have the tendency to clip the bottom of the image because most of the skins available are for PAL images and settings. It's as though the display should be shifted up slightly.

Changing Skins

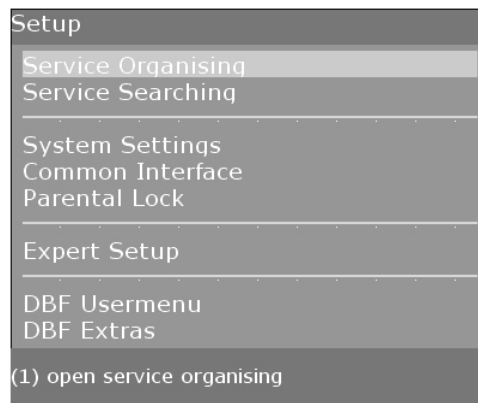
A simple search will find many skins for you. These two links have a large assortment of skins with which you can play.

<http://dreambox-skins.de.vu/>

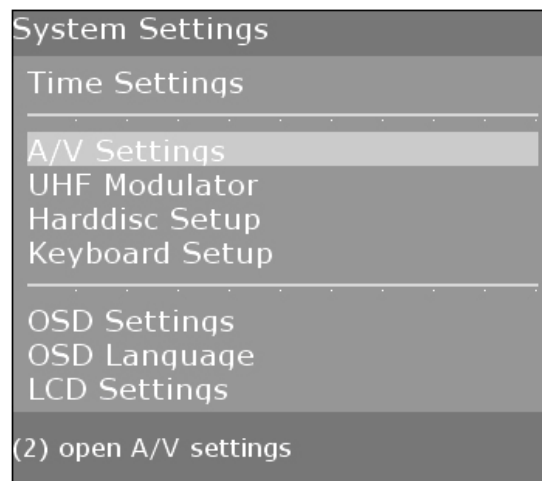
There should be a **read me** file in your downloads to help you place the skin files on your DreamBox appropriately.

Example: Installing SimpleSpace NTSC Skin

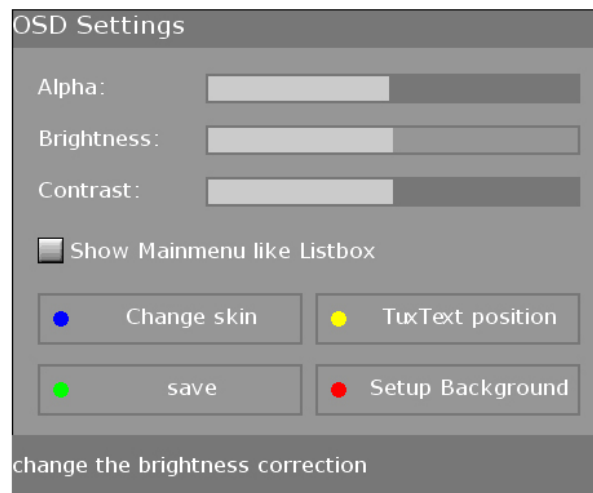
Press the small **Dream** button on your DreamBox remote or the **Menu** button and select **Settings** then select the **System Settings** option:



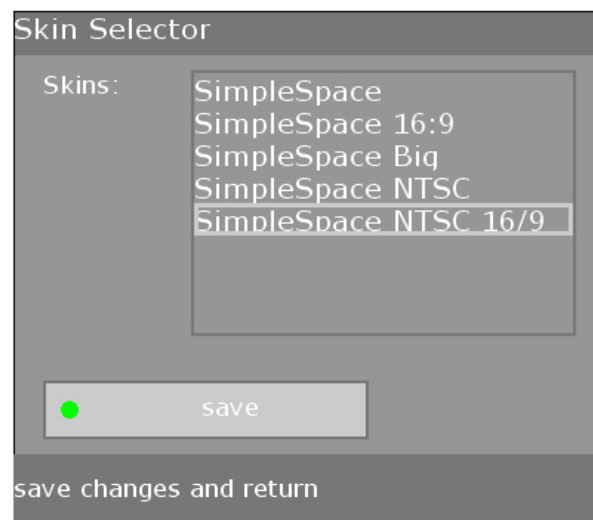
Select OSD Settings:



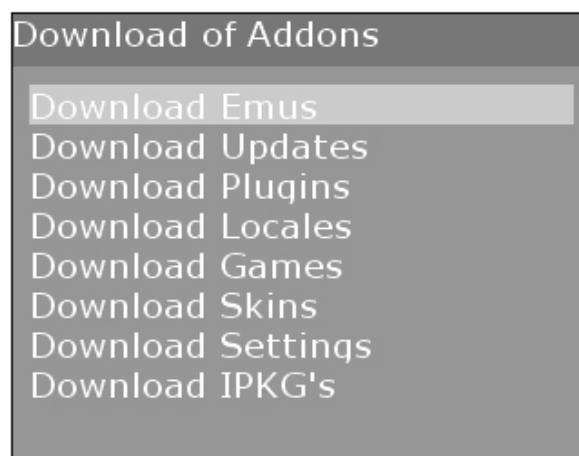
Go to the **Change skin** box and press **OK**:



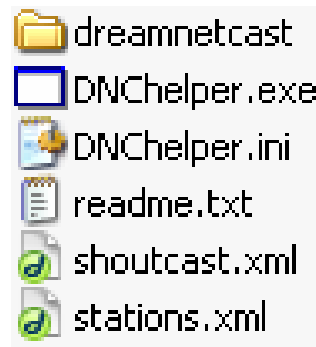
Select **SimpleSpace** skin and press **OK**:



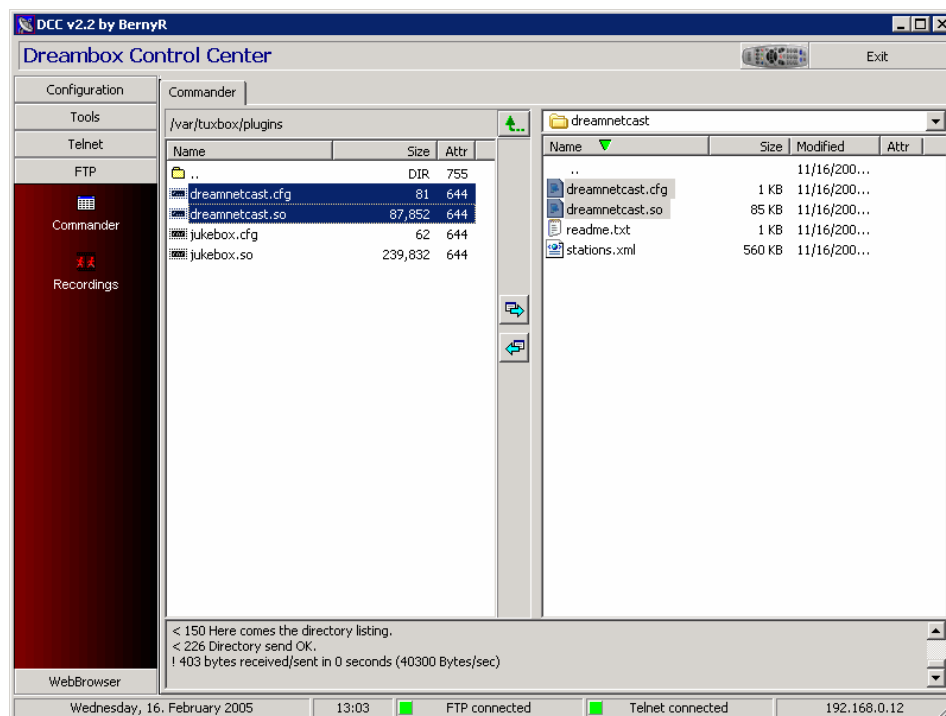
Additional Skins can be downloaded in DBF Extras:



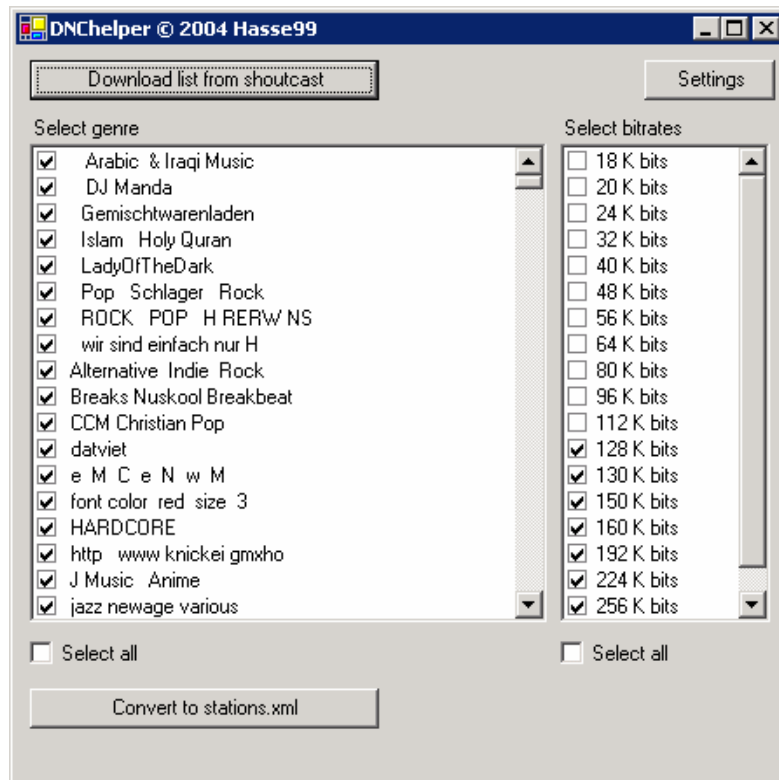
1. Download the plugin. (The Pi2 image already contains it.)
2. This ZIP file contains the actual DreamNetCast 1.0 plugin for your DreamBox and the DNC Helper application that needs to be installed on your PC.



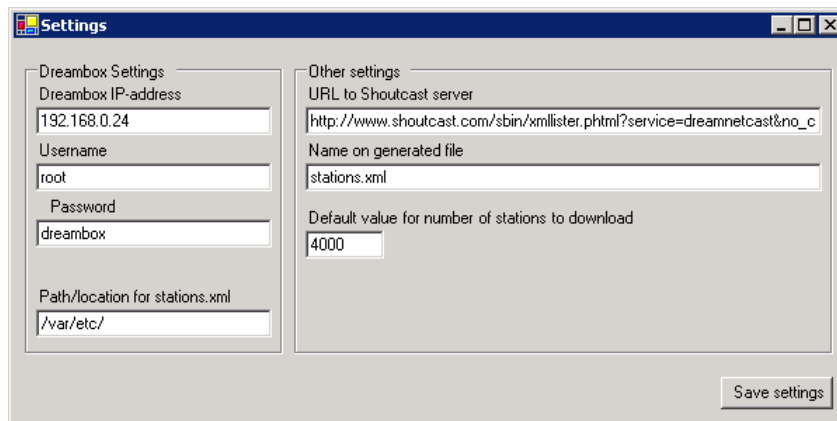
3. Start DCC and ftp the DreamNetCast plugin files from the **dreamnetcast** folder on your PC to your DreamBox's **/var/tuxbox/plugins** folder:



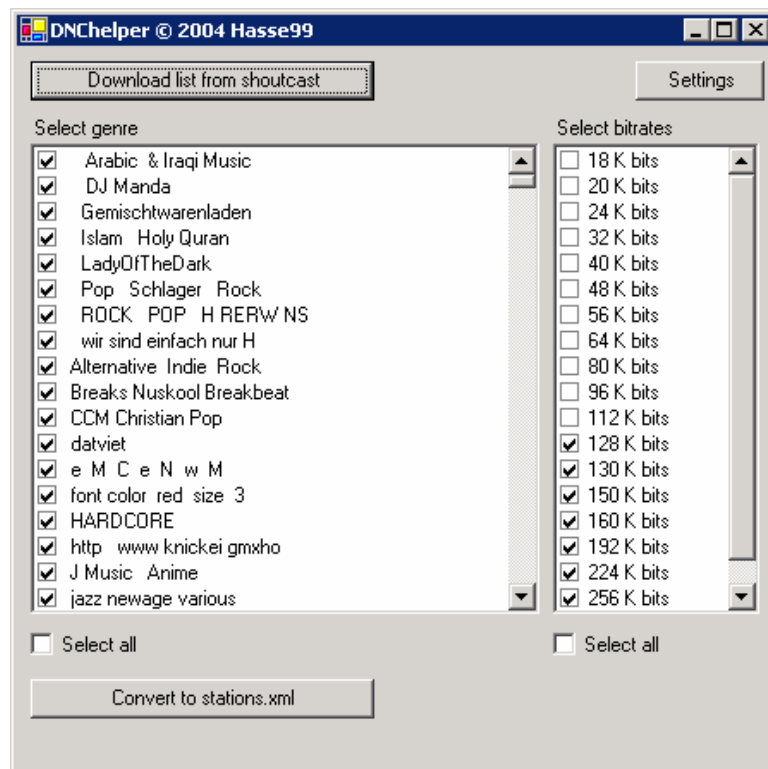
4. Now launch the **DNCHelper.exe** file on your PC:



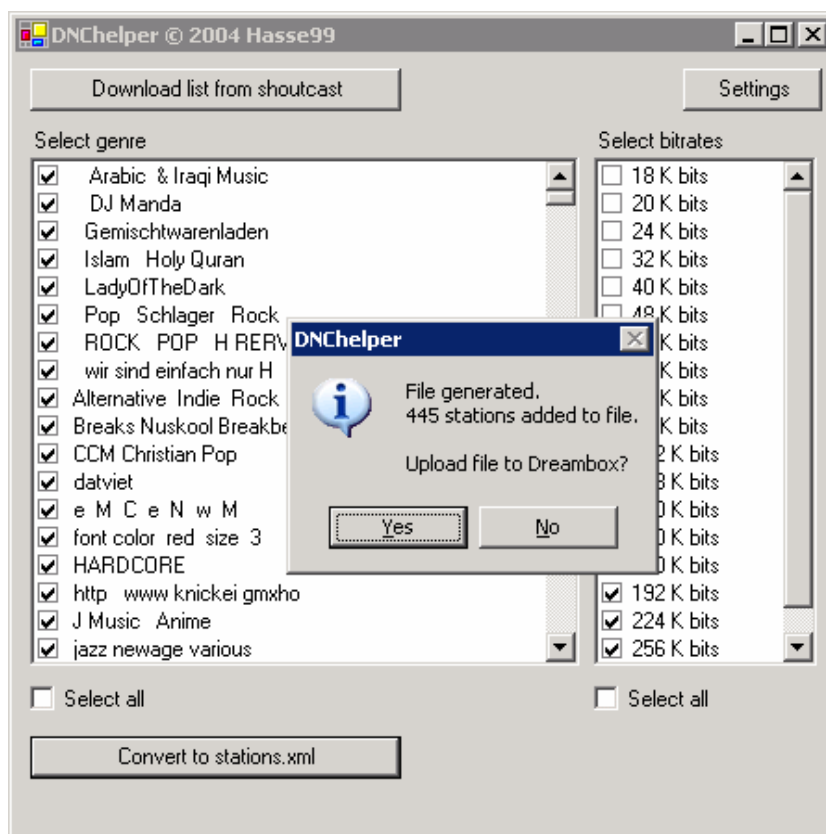
5. Verify and correct the settings to match those on your DreamBox (IP, Username, and Password):



6. Save settings and hit the **Download list from shoutcast** button:



7. Select which stations you like and hit the **Convert to stations.xml** button:



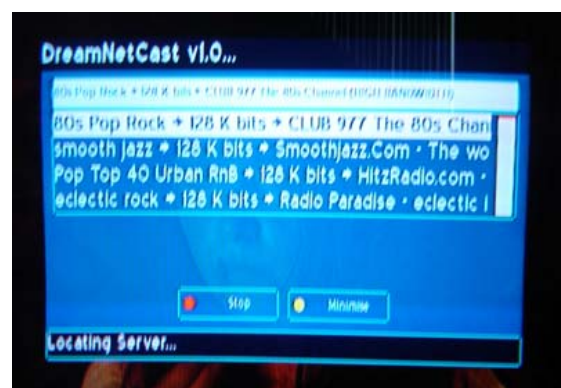
- Click the Yes button when prompted if you want to upload the file to DreamBox. It will be placed in the **/var/etc** folder.

NOTE: Depending on which image you're using, there may be a **stations.xml** symbolic link located in the above folder, if that's the case, please delete it before uploading the **stations.xml** file.

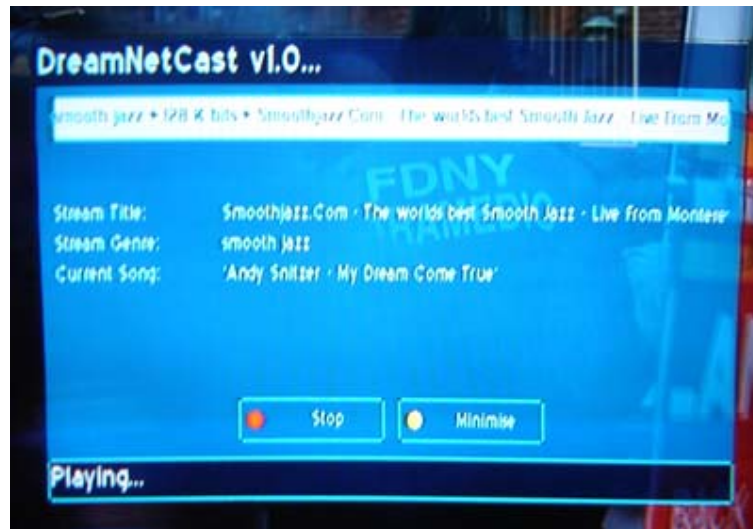
- Now hit the **Yellow** button on your DreamBox remote control and select the **DreamNetCast** plugin from the list:



- Select desired station and hit the **Green** button or scroll to the **Play** button and press **OK**:



- Enjoy the music.



NOTE: If you're using the DBF Pi image, there is no need to install this plugin as it is already included in the image. To start the DreamNetCast plugin just hold the AUDIO button on your remot control. Use only the DNC Helper App to modify the stations list.

Section 16

JukeBox

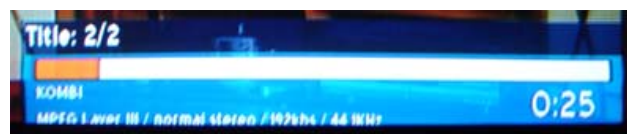
1. Download the plugin. You can install from the Addon menu in th Pi2 images.
2. Now hit the **Yellow** button on your DreamBox's remote control and select the **Jukebox** plugin from the list:



3. Navigate to your MP3 folder stored on either a Hard Drive or on a NFS share and hit the **OK** or **Play** button (you may also use the color buttons shuffle the order of playback):



4. Enjoy the music.



NOTE: If you're using the DBF Pi image, there is no need to install this plugin to play MP3 files. This image does not have the channel audio over the MP3 audio problem anymore. Just go into FILE MODE, select your MP3 and hit OK/PLAY.

Section 17

BitControl Streaming

BitControl is a fantastic program designed to stream whatever is playing on your DreamBox to your PC. This program is not freeware and I recommend that you try it then buy it. I personally want to support those who write great programs for us.

1. Download a trial version from <http://bitcontrol.com/download/download.shtml>.

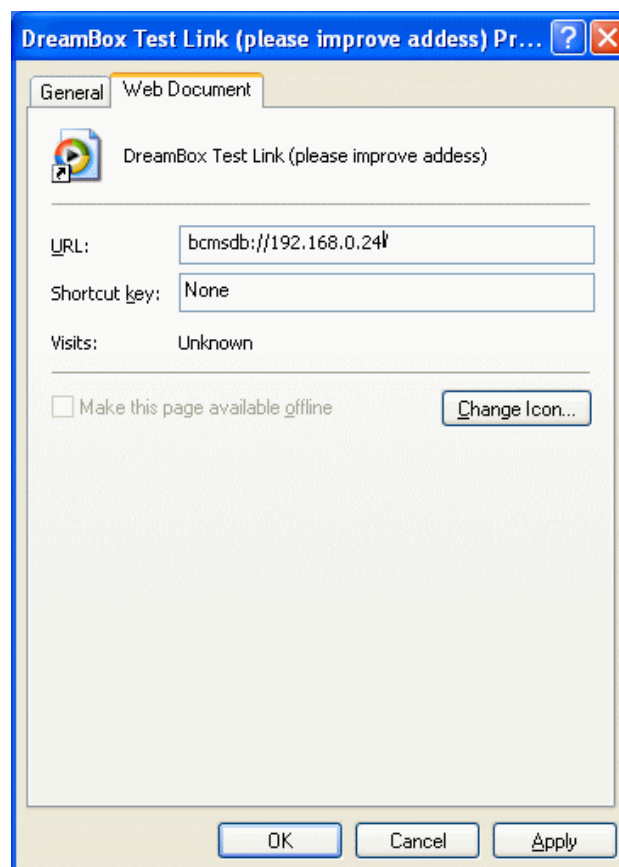
Select "**bitcontrol® Dreambox Bundle 2.0 (d-Box II compatible)**" Trial Version.

2. Double click on icon that was downloaded and install.

Find the new icon:



3. Right click on this icon and select "Properties" to change the IP address to yours and select "OK".



4. Now double click on the icon and Windows Media Player will pop up with the streaming from your DreamBox.

Links

Excellent links for downloads:

1. <http://www.dbnation.tv>
2. <http://www.dreamboxfornewbies.org>
3. <http://www.digsat.net>
4. <http://www.olmi.cz/dreambox>
5. <http://dreambox.sjerom.com/>
6. <http://www.dreamboxworld.com>

Excellent English Forum links:

1. <http://www.dbnation.tv>
2. <http://www.digsat.net/>
3. <http://sat-industry.net/>

Official Dream Multimedia Website

<http://www.dream-multimedia-tv.de/>

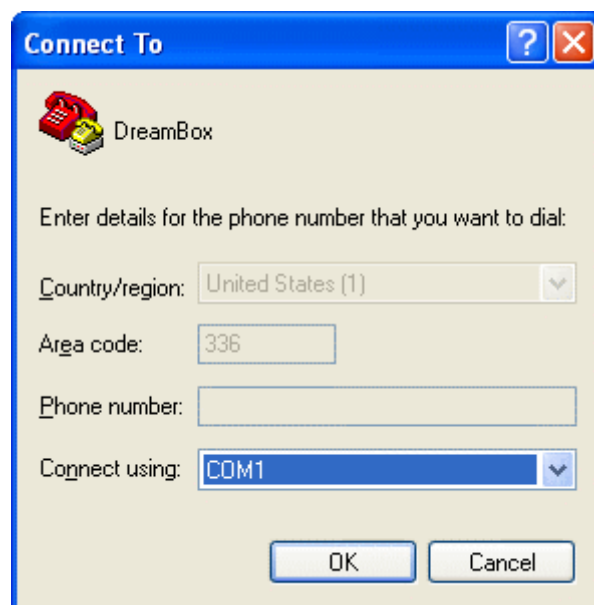
Addendum A

Assigning an IP address to the DreamBox 7020 with a Null Modem Cable when you don't have a router

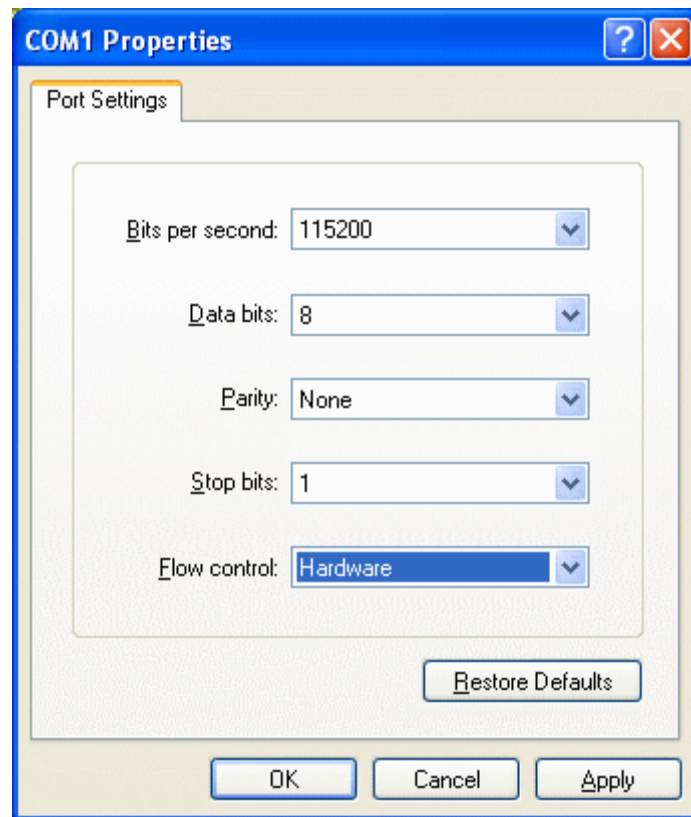
1. Start HyperTerminal on your PC. (Start → All Programs → Accessories → Communications → HyperTerminal)
2. This screen will come up so fill in a name of your choice and click 'OK'.



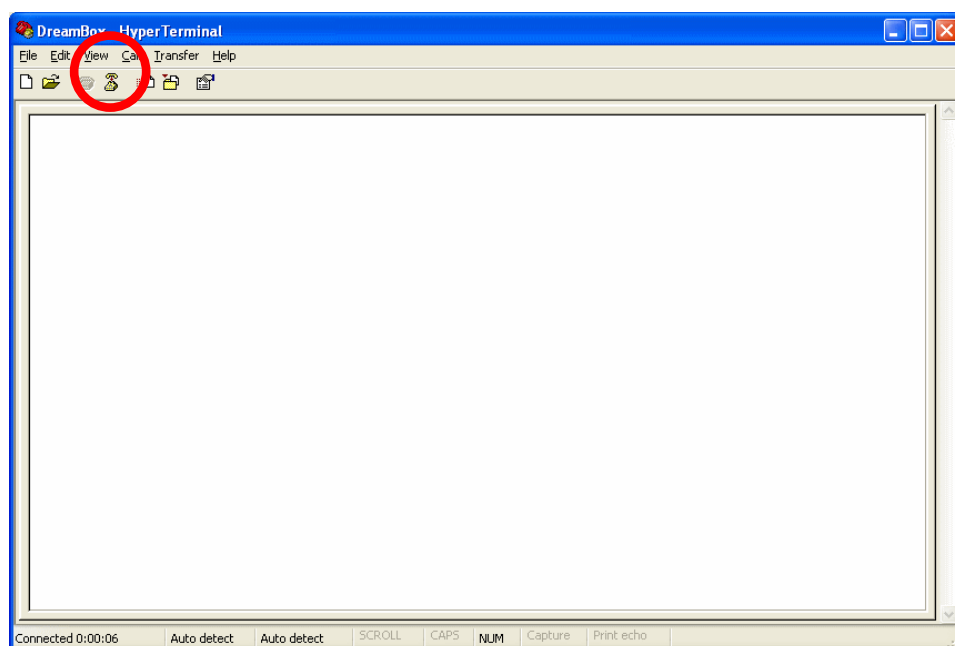
3. Don't make any changes to the screen below and click 'OK'.



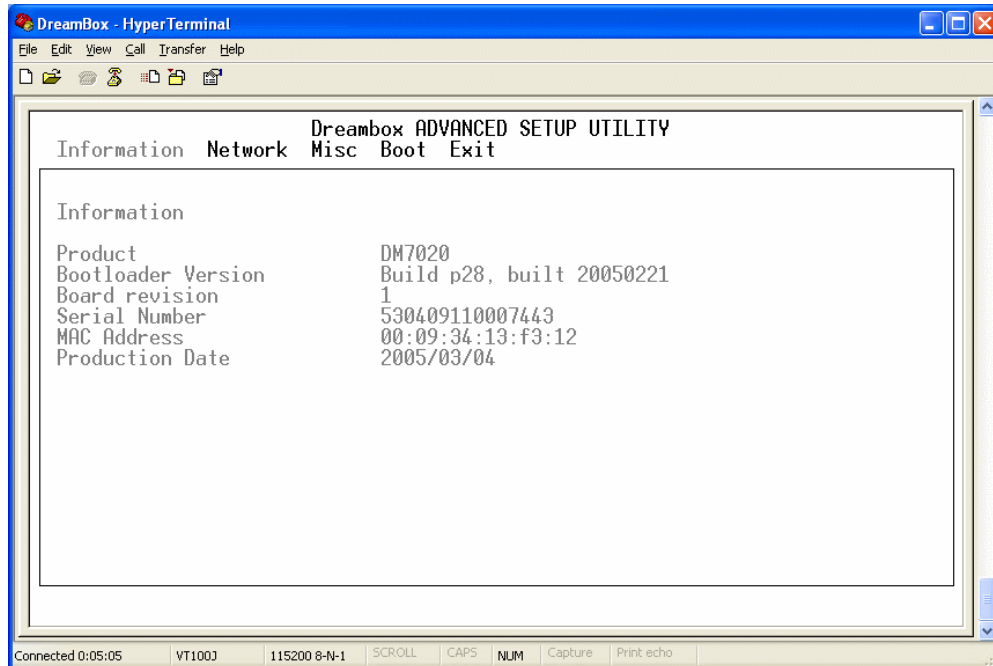
4. Change the 'Bits per second' to 115200 and click 'OK'.



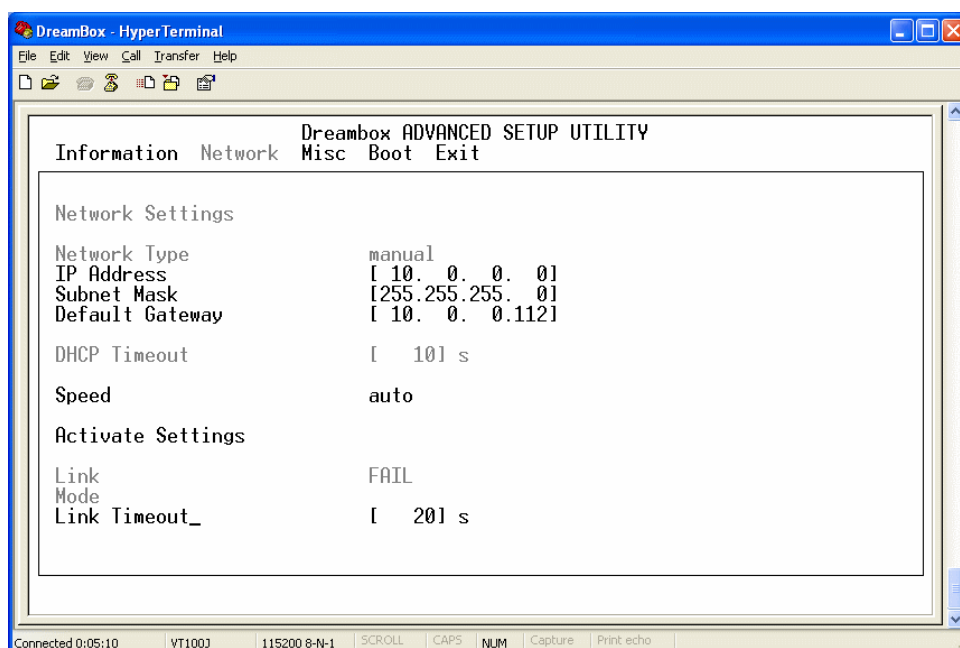
5. You will see this screen. Click the disconnect icon circled below.



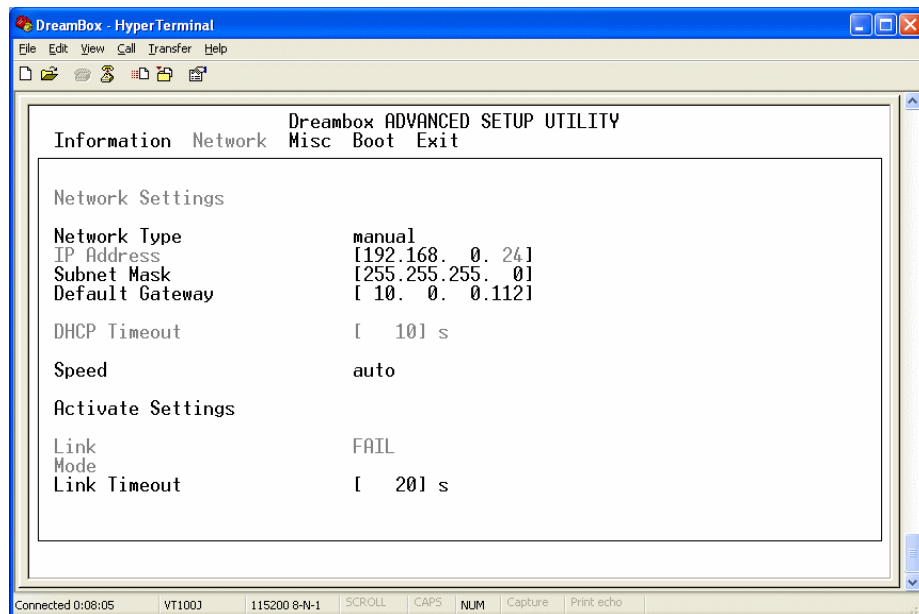
6. Hold the 'Down Arrow' on the DreamBox 7020 and turn it on continuing to hold the 'Down Arrow' until the LCD screen says 'Stop'.
7. Go back to the PC and press the 'S' key to get the following menu.



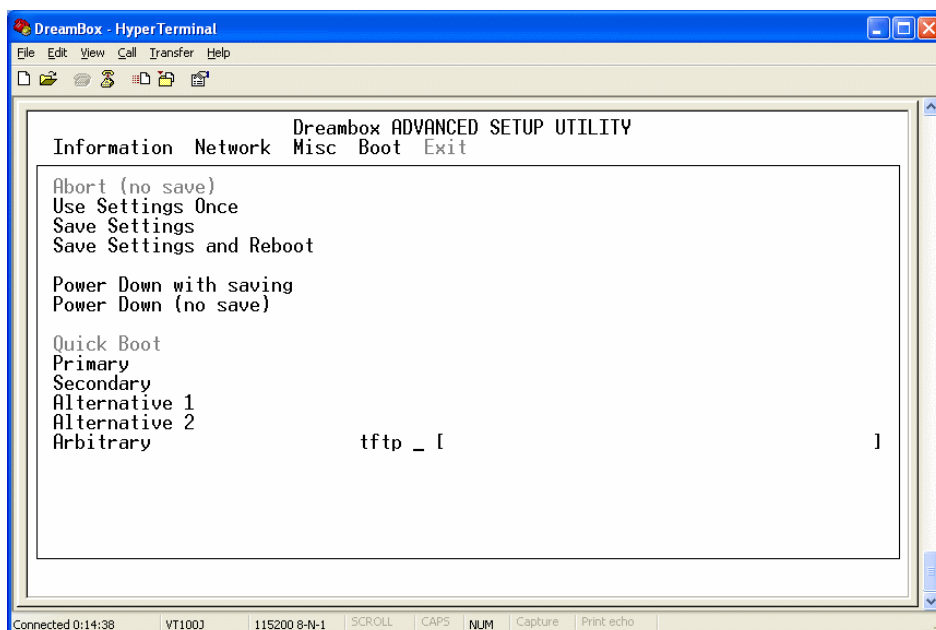
8. Use the '→' key to move to the 'Network' label.
9. Use the '-' key next to the '0' key to change the 'Network Type' to 'manual'.



10. Use the 'Up' and 'Down' arrow on the PC to move the icon to the end of 'IP Address' then begin typing your new IP address. This address must be assigned so that the first 3 groups of numbers are the same. Ie. 192.168.0.x There is no need to change anything else here.



11. Use the 'Up' and 'Down' arrow to place cursor back at the end of 'Link Timeout'.
12. Press the '→' key until you get to 'Exit'.



13. Press the 'Down' arrow to 'Power Down with saving' and hit 'Enter'. The DreamBox 7020 will power down and you can go back to [Step 4](#).